NASA/TM-2004-213248

Comparison of Satellite Observations of Aerosol Optical Depth to Surface Monitor Fine Particle Concentration

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1.0 Executive Summary

A goal of the National Aeronautics and Space Administration (NASA) Earth Science Enterprise (ESE) Earth Science Applications Program is to infuse NASA remote sensing data sources into existing partner agency decision support tools in order to enhance the performance of these tools. Through IDEA (Infusing satellite Data into Environmental Applications) NASA, in partnership with the U.S. Environmental Protection Agency (EPA), has performed this data enhancement on a project, in which NASA data was utilized to improve particle pollution forecasts. Researchers from NASA Langley Research Center and the EPA used data from the Moderate Resolution Imaging Spectroradiometer (MODIS) sensor and combined it with EPA ground network data to create a NASA data enhanced Forecast Tool. This tool is used to assist forecasters with providing the forecasts of particle pollution, or particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), for the EPA's Air Quality Index (AQI). The goal of this project is to use existing data sets and models developed for tropospheric chemistry research to aid the EPA and state and local agencies in making decisions concerning air quality to protect public health.

2.0 Introduction

The Earth System responds to both naturally occurring and human-induced change. The National Aeronautics and Space Administration (NASA) Earth Science Enterprise (ESE) seeks to understand the response of the Earth System via long-term observations from ground networks, sub-orbital platforms, and space-based assets. The role of the Earth Science Applications (ESA) Program within the ESE is to incorporate these observations into decision support tools employed by partners and to assess the performance of these measurements in decision support tools. The approach is to enable the incorporation of Earth Science mission outputs (i.e., models and remote sensing data products) to serve as inputs to decision support systems. Ultimately, the desired outcome is an enhanced decision support tool that results in significant socio-economic benefits.

One application into which NASA observations have already been incorporated is Air Quality Management. During the fall of 2003, NASA, through the Infusing satellite Data into Environmental Applications (IDEA) project, provided a prototype, near real-time data-fusion product to the Environmental Protection Agency (EPA) with the goal of improving the accuracy of EPA's next-day Air Quality Index (AQI) forecasts, (Kittaka, 2004; Szykman, 2004; and Al-Saadi, 2004).

2.1 Criteria pollutant and scientific rationale

Under the Clean Air Act of 1990 (http://www.epa.gov/oar/caa/contents.html), the EPA is required to set standards for concentrations of air quality pollutants, ensure these standards are met through monitoring, and establish a consistent means of reporting air quality to the public, which, currently, is the Air Quality Index (AQI). The EPA is currently setting air quality standards relating to the concentrations levels of six main air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide and lead. The EPA is also responsible for forecasting concentration levels of two of these pollutants: ozone and particulate matter (PM). These forecasts are used to alert the public about potentially harmful ozone and PM levels. Particle pollution or particulate matter is the general term used to describe a mixture of solid particles and liquid droplets in the air. Particles are classified as coarse (i.e., dirt or dust) or fine (i.e., the by-products of fuel combustion). PM can be emitted directly into the atmosphere (i.e., wind blown dust or dirt from unpaved roads) or formed in the atmosphere through chemical reactions (i.e., sulfates and nitrates formed from emissions from power plants and vehicle exhaust.) Many voluntary programs exist between the EPA, state agencies and industry, which enable "Action Days" once pollution levels exceed a certain threshold. In addition to notifying the public to limit exposure, voluntary emission reductions are suggested for industry and for private citizens.

In October of 2003, the EPA began providing AQI forecasts for particulate matter less than 2.5 μm in diameter, or $PM_{2.5}$. Particulates in this size range are called respirable aerosols and are easily entrapped by the lungs. Pollutants and diseases carried by respirable aerosols are a significant health threat. According to the World Research Institute, an environmental research and policy organization, "the health effects of

particulates are strongly linked to particle size. Small particles, such as those from fossil fuel combustion, are likely to be the most dangerous, because they can be inhaled deeply into the lungs, settling in areas where the body's natural clearance mechanisms can't remove them" (WRI, 1999). The EPA notes that the chief causes for concern are that increases in PM levels are linked to:

1. Increased hospital admissions and emergency room visits for people with heart and lung disease
2. Increased absences from work and school
3. Reduced visibility due to haze
4. Altered nutrient balance in the soil and in bodies of water where PM settles
5. Stained and/or eroded buildings, historical monuments, etc. which are costly to repair

Index Values	Category	Cautionary Statements	$PM_{2.5}$ (ug/m^3)	PM_{10} (ug/m^3)
0-50	Good	None	0-15.4	0-54
51-100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion	15.5-40.4	55-154
101-150	Unhealthy for Sensitive Groups	Sensitive groups should reduce prolonged or heavy exertion	40.5-65.4	155-254
151-200	Unhealthy	Sensitive groups should avoid prolonged or heavy exertion; everyone else should reduce prolonged or heavy exertion	65.5-150.4	255-354
201-300	Very Unhealthy	Sensitive groups should avoid all physical activity outdoors; everyone else should avoid prolonged or heavy exertion	150.5-250.4	355-424

Table 1. EPA Air Quality Index for Particle Pollution.

In early 2003, the EPA received a Congressional mandate to revise the standards that govern $PM_{2.5}$. The standards being revised included peak concentration values per hour, peak concentration values over a 24-hour period for several different land cover types, and compliance penalty thresholds relating to litigation and public health. Technical definitions of legal requirements were revised and preparations for monitoring intercontinental transport were made. The timing of this mandate, along with the development by the EPA of standard methods for forecasting $PM_{2.5}$ and the availability of a mature satellite aerosol product at relatively high spatial resolution, made $PM_{2.5}$ forecasting an ideal candidate for incorporation of NASA satellite data.

The EPA has a ground network of monitoring stations around the country that are currently being used to monitor concentration levels of $PM_{2.5}$ and as input to forecasts of $PM_{2.5}$. However, the EPA recognizes that the utility of this network may be improved with the addition of satellite imagery, which can provide information about the air in regions not covered by these monitoring stations. The addition of NASA data could also assist in identifying areas that are generating particle pollution and areas that are receiving pollution due to transport between regions. Aerosol products from existing NASA satellite systems were identified as potential data sets that could add value to the forecast.

2.2 Ground based measurement characteristics

The EPA ground network consists of in-situ $PM_{2.5}$ monitoring stations located throughout the country, with higher concentrations of monitors in more densely populated regions. These monitors are operated by the State and Local Air Monitoring Stations (SLAMS) and National Ambient Monitoring Stations (NAMS) networks. In addition to Federal Reference Monitors (FRM), which acquire measurements of $PM_{2.5}$ over 24-hour sample periods, the ground network consists of several hundred continuous $PM_{2.5}$ Federal Equivalent Monitors (FEM) that report $PM_{2.5}$ concentration data hourly to the EPA's AIRNow Data Management Center. The continuous FRMs utilize several methods that measure the different properties of suspended particles, including mass and mass equivalent, and visible light scattering. The Tapered Element Oscillating Microbalance (TEOM) instrument measures particle mass as determined by its inertia, with a detection limit of ~5µg/m^3 for a 5 minute average. The Beta Attenuation Monitor (BAM) measures particle mass by its electron attenuation properties, with a detection limit of ~5µg/m^3 for a one hour average. The nephelometer measures light scattered from particles and gases and provides a direct estimate of the aerosol light-scattering coefficient with a detection limit of ~Mm^{-1} for a ten minute average. Further details can be obtained from Watson et al, (1998).

2.3 Satellite based measurement characteristics

2.3.1 MODIS

The Moderate Resolution Imaging Spectroradiometer, MODIS, aboard the Terra satellite has a 10:30am equatorial overpass time along a sun-synchronous near-polar orbit. MODIS has a viewing swath width of 2,330 km and provides global coverage every one to two days. For additional information regarding MODIS, refer to http://modis.gsfc.nasa.gov.

The MODIS data products utilized in this study are the aerosol optical depth (AOD) and the cloud optical thickness (COT). Aerosol optical depth retrieved at .55µm, which is one of the parameters included in the aerosol data product, MOD04_L2, has a resolution of 10x10 km^2 at nadir (Kaufman et al, 1998). This aerosol product provides a measure of extinction (how much light is unable to pass through a column of atmosphere as a result

of aerosols, or particles, in the air) and therefore can be used to estimate the amount of aerosols in the atmosphere. Cloud optical thickness included in the cloud product, MOD06_L2, has a resolution of 1x1 km^2 at nadir. The COT provides cloud locations as well as cloud radiative properties. In this study, the COT was degraded to 5x5 km^2 for visualization.

2.3.2 GOES WF_ABBA

The Geostationary Operational Environmental Satellites (GOES) satellites are part of the NOAA operational weather satellite system. They are in geosynchronous orbits allowing them to maintain fixed positions relative to the Earth. Additional GOES information can be obtained from http://orbit-net.nesdis.noaa.gov/arad/fpdt/goescat_v4/html/GOES_I_1_overview.html.

Wildfire locations are determined from the Wildfire Automated Biomass Burning Algorithm (WF_ABBA). The WF_ABBA data is courtesy of NOAA/NESDIS (National Environmental Satellite, Data and Information Services) and the University of Wisconsin Cooperative Institute for Meteorological Satellite Studies (CIMSS). The GOES WF_ABBA is an automated algorithm which uses visible and infrared wavelengths to locate fire pixels and characterize sub-pixel burning. General information for WF_ABBA is located at http://cimss.ssec.wisc.edu/goes/burn/abba.html. Detailed information on the GOES fire algorithm and recent improvements can be found in Prins and Menzel, (1994) and Prins et al., (1998; 2001a; 2001b).

2.3.3 Eta/EDAS

The Eta Regional Forecast model and associated Eta Data Assimilation System (EDAS) is part of the operational forecasting system within the National Weather Service's National Centers for Environmental Prediction (NCEP). Details of the NCEP forecasting and data assimilation system can be found at http://wwwt.emc.ncep.noaa.gov/modelinfo/. Eta forecasted winds are used to provide trajectory-based 48-hour forecasts of the movement of regions of high MODIS AOD to the EPA $PM_{2.5}$ AQI forecasters. The Eta forecast winds are provided in GRIB format and are obtained at ftp://tgftp.nws.noaa.gov. The NOAA Air Resource Laboratory (ARL) provides an archive of the NCEP EDAS analyses. For this study, the u- and v-components of the wind at the 850 mb pressure level were used to provide a meteorological context for the MODIS and $PM_{2.5}$ observations in the IDEA data fusion product (see Figure 2). Additional ARL EDAS archival information is available at http://www.arl.noaa.gov/ss/transport/edas.html.

2.4 Objective of comparison

The objective of the comparison is to determine the appropriateness and benefit of additional forecasting tools derived from combining MODIS fine aerosol data and modeling code developed for tropospheric chemistry research at NASA Langley. The forecasting tools are provided to Air Quality Index forecasters through the EPA to potentially improve the forecasting of fine aerosol pollution outbreaks.

3.0 Site-by-Site Satellite/In-Situ Comparison

3.1 Background on time period

The time period chosen for the comparison is September 2003. Evaluation is needed for a $PM_{2.5}$ pollution event and September marks the peak in the forest fire burning season. Figure 1 shows a map of fire locations during September 2003. The pink and purple diamonds indicate a 24-hour accumulation of fire locations as detected by the GOES 12 Wildfire Automated Biomass Burning Algorithm (WF_ABBA). Pink indicates the presence of a fire whereas purple indicates high probability of a fire location. For additional information about GOES WF-ABBA refer to http://cimss.ssec.wisc.edu/goes/burn/abba.html.

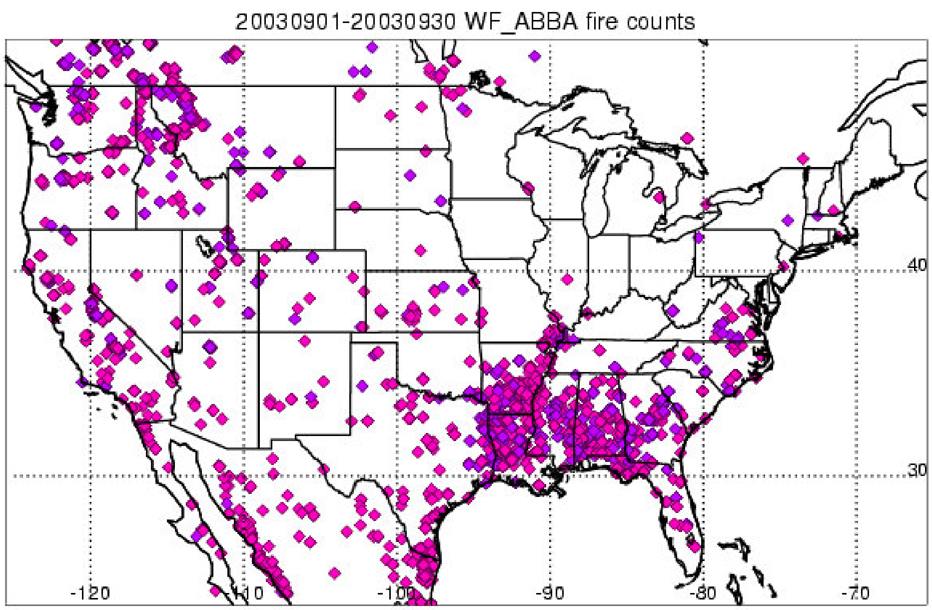


Figure 1. GOES 12 Wildfire Automated Biomass Burning Algorithm (WF_ABBA) fire locations for September 2003.

During September there were frequent small fires associated with agricultural burning in the lower Mississippi River valley and Alabama. In early September 2003 forest fires in the Northwestern United States and British Columbia produced emissions that led to a large enhancement in tropospheric aerosol loading. The initial aerosol loading from these Northwestern wild fires in the troposphere was captured by MODIS. This enabled the IDEA team to produce forecasting tools during a pollution outbreak and evaluate their effectiveness and impact on air quality forecasting in the Midwest and Eastern United States.

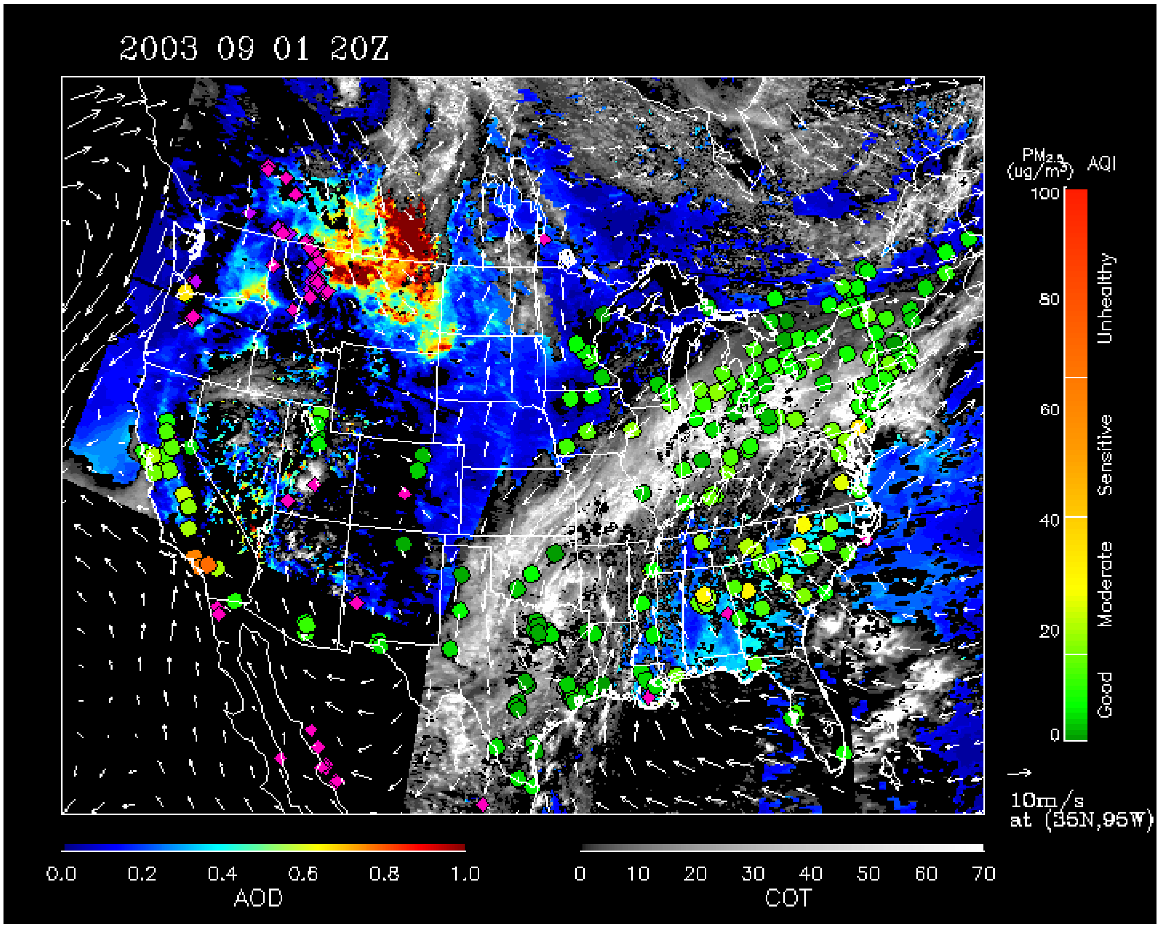


Figure 2. Satellite/in-situ fusion map for 1 September 2003.

Figure 2 is an example of one forecast tool produced by the IDEA team. It depicts a composite integrating data from several sources on September 1, 2003 (indicated at top of figure). Daily maps of this fusion product from September 1 through September 30, 2003 are provided in Appendix A. Aerosol optical depth (AOD) from the MODIS instrument aboard the Terra satellite is shown on the rainbow color scale with values greater than 1.0 shown in dark red. MODIS cloud optical thickness (COT) is shown on the gray scale. MODIS AOD is not derived for cloud filled pixels, therefore the cloud fields derived from MODIS are plotted to help define synoptic weather features important to the movement of aerosols. The location of each continuous $PM_{2.5}$ monitor from the SLAMS and NAMS is represented by a colored circle. The color of the circle indicates an hourly averaged $PM_{2.5}$ concentration at 20Z with a color scale shown in the vertical color bar. The US EPA Air Quality Index (AQI) rating ("Good", "Moderate", etc.) associated with $PM_{2.5}$ concentrations is shown with the vertical color bar. The pink and purple diamonds indicate fire locations as described for Figure 1. The 850 mb wind field vectors at 20Z from the Eta Data Assimilation System (EDAS) are plotted as arrows to show wind direction and speed. Winds at this level illustrate the flow in the lower troposphere.

Often this can be used to qualitatively show areas of convergence and divergence, and is one indicator of vertical air motion. An example wind vector is given in the legend. However, the magnitude and direction of this vector is only valid at the location given due to the map projection (Lambert's conformal conic projection) used to display the data. This data fusion visualizes the relationship between the MODIS AOD and COT, hourly $PM_{2.5}$ mass concentration and the air quality index, providing a pseudo-synoptic view of aerosol events across North America.

3.2 Coincidence requirements

For the correlation analysis presented in section 3.3, the data pairs of satellite AOD and ground based $PM_{2.5}$ must be co-located in space and time. For every ground station, the 10x10 km^2 MODIS AOD observations that include the longitude and latitude of the site are accumulated. The hourly surface $PM_{2.5}$ data are then linearly interpolated to the time of each MODIS observation. Only surface observations within plus or minus one hour are considered for possible temporal coincidences.

3.3 Time series analysis

In figure 3, an example of the MODIS AOD and surface $PM_{2.5}$ time series for the month of September 2003 is presented. The September 2003 time series plots for every ground station are provided in Appendix B. The station name, Metropolitan Statistical Area (MSA), and station ID are reported in the figure. If the site is in a rural area, the site name is listed as "Not in an MSA".

Figure 3 shows the surface $PM_{2.5}$ data for both 1-hour (solid line) and 24-hour (dashed line) averages reported at an hourly frequency. The left vertical axis is mass concentration of $PM_{2.5}$ and the right vertical axis is MODIS AOD. Coincident values are represented by symbols:

• - MODIS AOD
* - hourly $PM_{2.5}$ mass concentration
Δ- 24 hour average $PM_{2.5}$ mass concentration.

Correlations are reported are for both 1-hour and 24-hour average surface $PM_{2.5}$ data. The correlations are derived from coincident MODIS AOD and $PM_{2.5}$ data pairs as described above. N_{poss}, is the total number of MODIS viewing opportunities over the site and N_{MODIS} corresponds to the number of passes that optical depth values could be determined (cloud-free passes, etc…). The number of coincident data pairs used to determine the correlation is reported as $N_{corr.}$ Figure 3 provides critical information needed to determine if the MODIS AOD is indicative of $PM_{2.5}$ concentrations at or near the surface. The vertical distance between coincident MODIS and $PM_{2.5}$ points (as plotted) reflects the AOD/$PM_{2.5}$ ratio. This ratio is another factor to be considered in determining if the aerosol is well mixed and at or near the surface or if the aerosol is aloft. If the distance is relatively small then the ratio is close to 1.6/100., and an inference can be made that the aerosols may be near the surface.

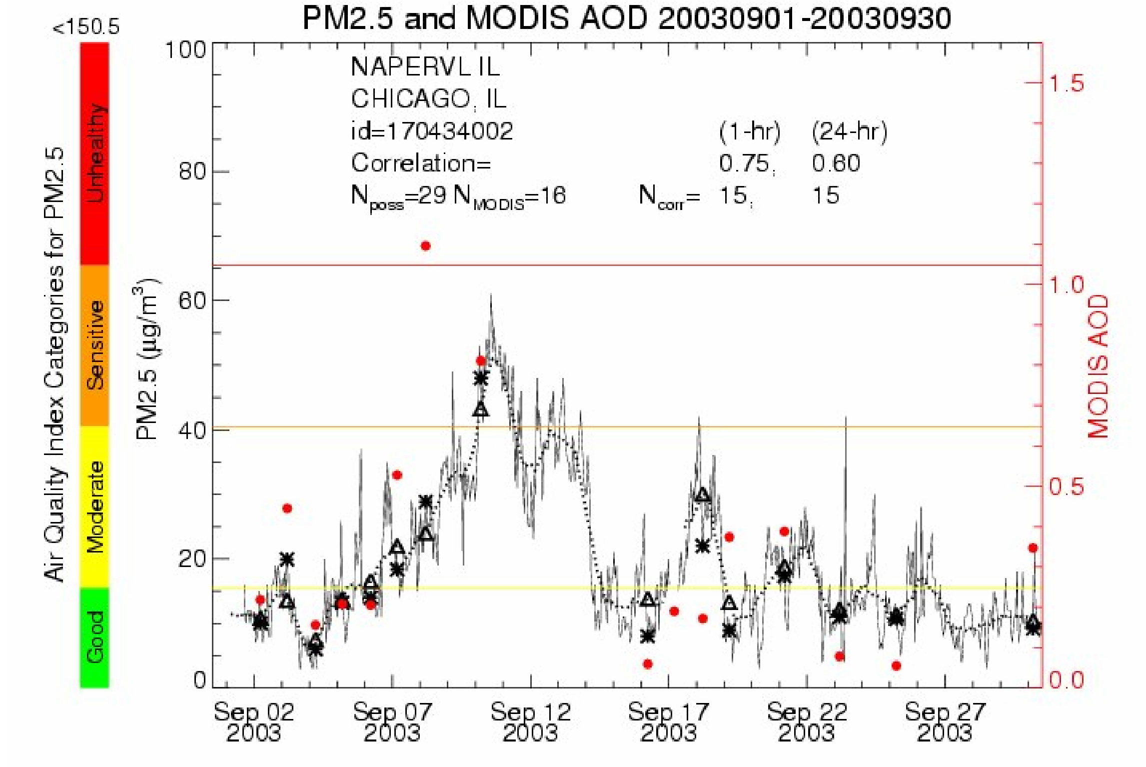


Figure 3. Time-series and correlations between MODIS AOD and hourly 1-hour/24-hour average ground $PM_{2.5}$ mass concentrations for site 170434002 in Naperville, IL during September 2003.

The vertical axes of the time-series plots are scaled as shown in the figure above for most of the sites listed in Appendix B. However, clipping of the hourly $PM_{2.5}$ mass concentration reading can occur when the reading exceeds the value of 100. Where appropriate, to show MODIS AOD values that exceed 1.6 or 24-hour average $PM_{2.5}$ mass concentration values that exceed 100, the vertical axes are proportionally expanded and labeled "***EXPANDED RANGE***".

3.4 Site-by-site correlation analysis

Figure 4 summarizes the MODIS AOD and 1-hour $PM_{2.5}$ correlations derived from the September time series for each ground station across the United States and parts of Canada (see Appendix B). The size of the point plotted indicates the number of coincidences between MODIS AOD and hourly $PM_{2.5}$ concentrations during this period. The significance of the correlation generally increases with increasing number of coincidences. The color indicates the value of the correlation coefficient. This correlation summary provides a site specific and geographical perspective on how well the MODIS AOD observations depict the variability in surface $PM_{2.5}$ measurements. During this month, higher correlations are generally found in the eastern half of the US and in parts of the Pacific Northwest.

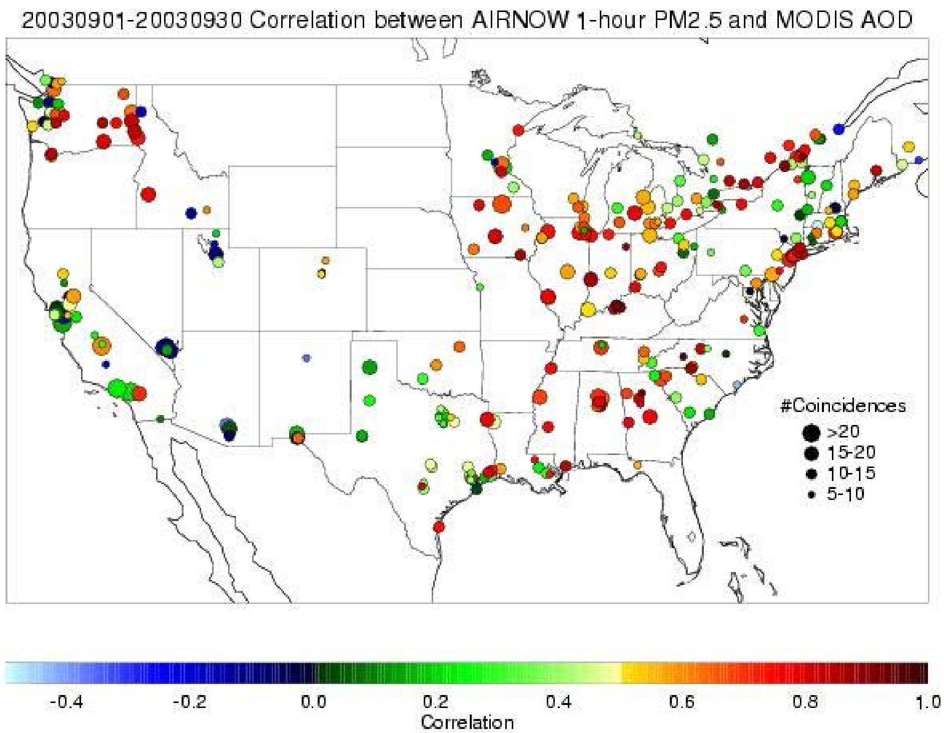


Figure 4. National summary plot of correlations between MODIS AOD and hourly $PM_{2.5}$.

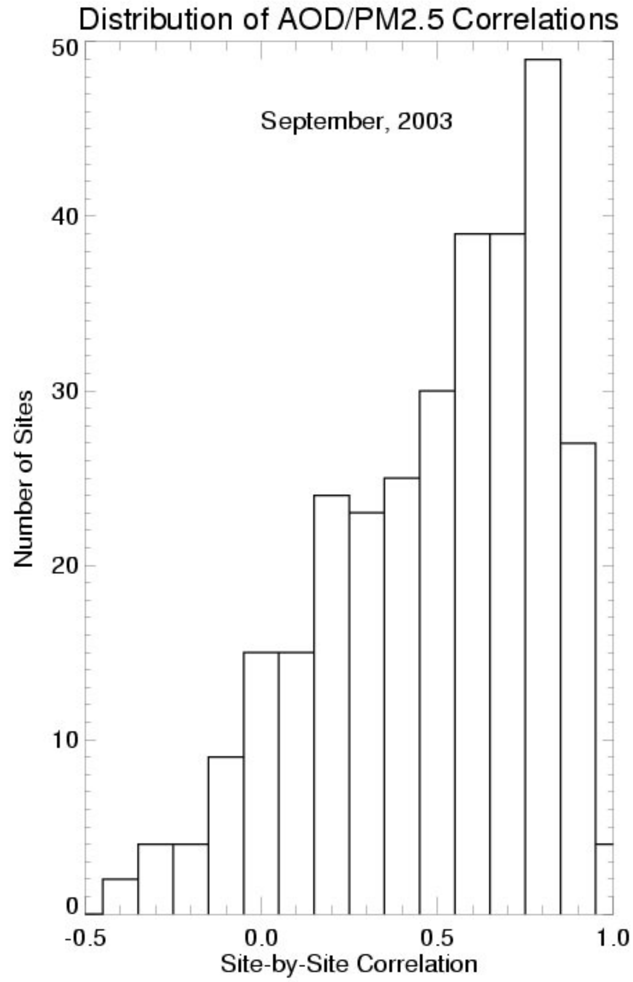


Figure 5. Histogram of the site-by-site correlations between coincident MODIS AOD and AIRNow $PM_{2.5}$ measurements during September, 2003.

Figure 5 shows the histogram of the site-by-site correlations during September, 2003. The histogram includes correlations for a total of 309 AIRNow sites. The distribution of correlations peaks at 0.8 with 51% of the AIRNow sites having correlations greater than 0.5 (orange to red in Figure 4) and 11% of the AIRNow sites having negative correlations (blue in Figure 4) during September, 2003.

4.0 National Satellite and In-Situ Comparisons

4.1 Maps of 40 km binned mean MODIS AOD statistics

Figure 6 shows a map of the mean MODIS AOD for September, 2003. To construct this map, all of MODIS AOD granules (10 km x 10 km spatial resolution) obtained for September 2003 are mapped onto the Eta 40 km Lambert Conformal grids (185 x 129 points). The mean, the standard deviation and the counts of MODIS AOD at each grid point are derived from the regridded MODIS AOD. The areas in black are where no MODIS AOD is retrieved over a 40 km x 40 km grid for the entire month due to either high surface reflectance or cloudiness.

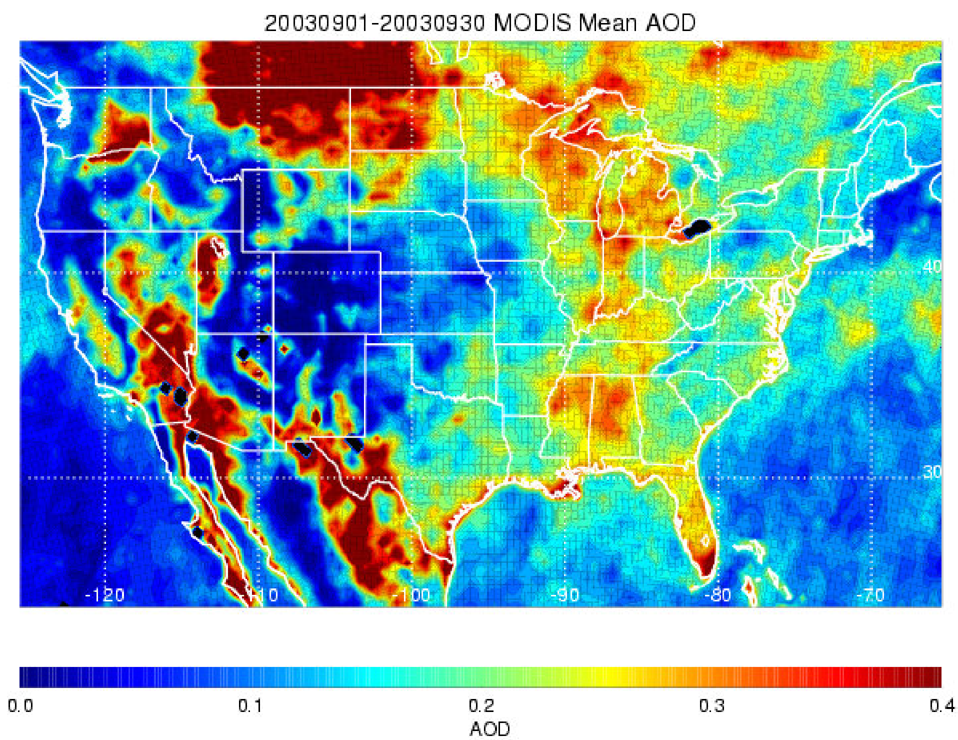


Figure 6. Map of the mean 40 km binned MODIS AOD for September, 2003.

The September 2003 mean MODIS AOD is strongly influenced by the smoke plume from the fires in the Northwestern US. These fires led to very high aerosol loading along the Montana/North Dakota/Canada border during early September resulting in mean AOD values over 0.4 in this region. The local plume from the Northwestern US fires is evident along the Washington/Oregon border and extending into Eastern Washington State. Long-range transport of this smoke plume contributed to the high mean AOD in the Great Lakes region during September 2003. These regions influenced by wildfire-enhanced aerosol correspond to areas where high correlations exist between MODIS AOD and surface $PM_{2.5}$ (Figure 4). Aerosol loading is generally high over Alabama and Mississippi. Agricultural burning in the lower Mississippi River valley and Alabama (see

Figure 1) contributed to this regional aerosol burning. High aerosol loading along the Gulf coast may be influenced by local sea breeze circulations transporting sea salt aerosols inland. Aerosol loading is generally low in the central plains region. High surface reflectance in the Southwestern US and Mexico results in false MODIS AOD retrievals over the desert Southwest.

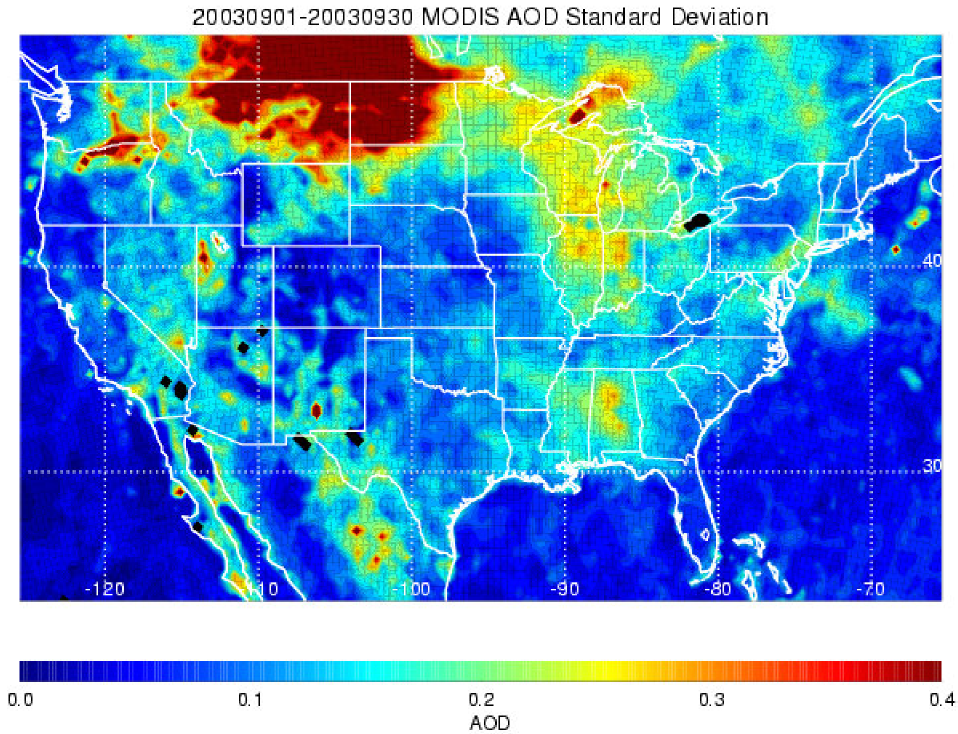


Figure 7. Map of the standard deviation of the 40 km binned MODIS AOD for September, 2003.

Figure 7 shows a map of the standard deviation of the 40 km binned MODIS AOD for September, 2003. The standard deviation is dominated by the influence of fires in the Northwestern US. The standard deviation of the MODIS AOD in regions influenced by smoke transport from these fires is as large as the mean AOD (Figure 6) due to the relatively short (~10 days) duration of this event. The standard deviation of the 40 km binned MODIS AOD is significantly lower than the mean 40 km binned AOD over the desert Southwest, indicating that high surface reflectivity introduces systematic, not random biases in the MODIS AOD retrievals over desert regions. Localized regions of high standard deviation in California, Nevada, Arizona, and Mexico reflect real variations in AOD associated with major urban areas.

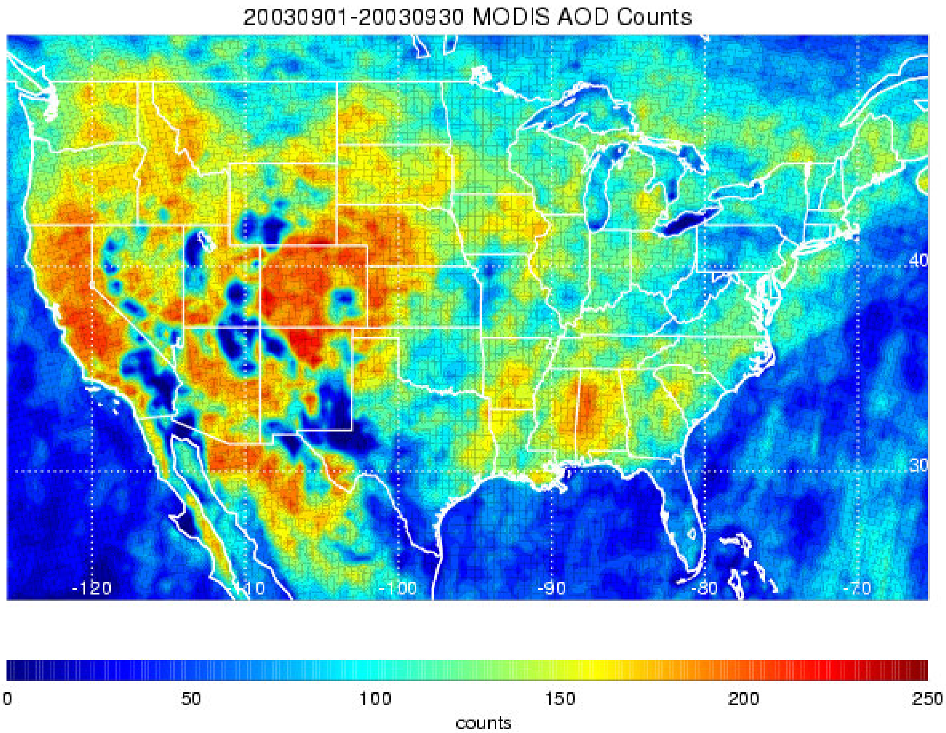


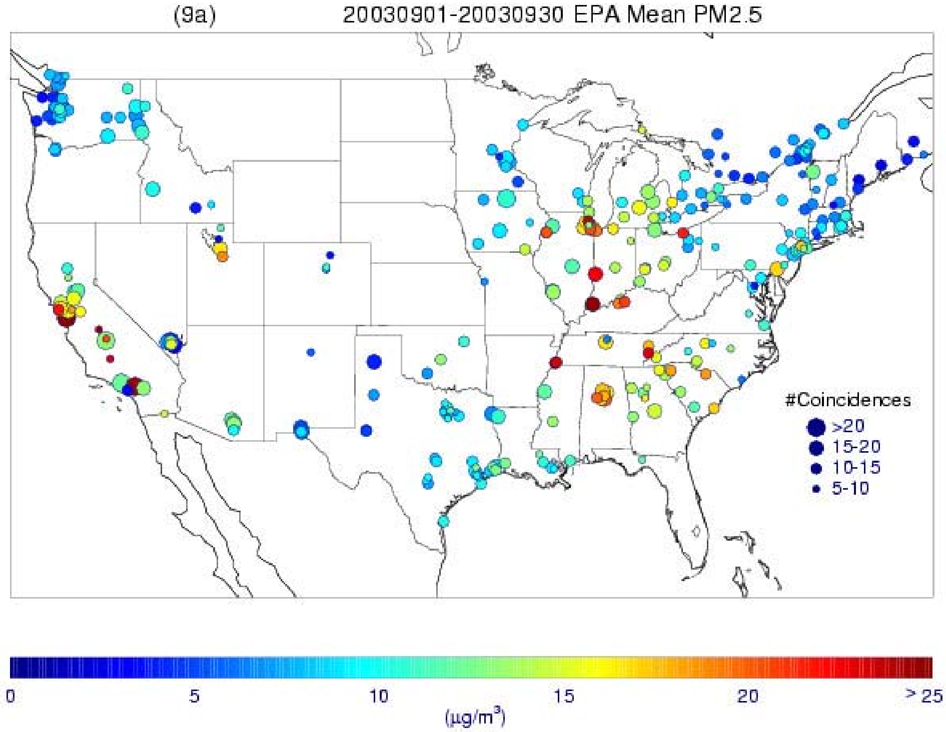
Figure 8. Map of the number of MODIS AOD retrievals within each 40 km bin for September, 2003.

Figure 8 shows the number of MODIS AOD retrievals used to obtain the 40 km binned statistics. In the desert Southwest, low counts occur in regions with high mean AOD that are caused by high surface reflectivity (Western Nevada, Southern California, Salt Lake City, northeastern Arizona, southeastern New Mexico and west Texas). Counts are lower over the Gulf of Mexico and Atlantic Ocean due to sun glint interference in the AOD retrievals. Counts are lower over the Pacific due to missing MODIS AOD granules and persistent low-level cloudiness.

4.2 Site-by-site mean statistics

The amount of information that MODIS AOD can contribute to characterization of the mean spatial distribution of aerosols at the AIRNow sites is quantified by comparing the site-by-site mean and standard deviations of the AIRNow $PM_{2.5}$ and MODIS AOD. Figures 9a and 9b show the site-by-site distribution of mean AIRNow $PM_{2.5}$ and mean MODIS AOD for September 2003. The September 2003 weighted national mean is $11.75\mu g/m^3$ and 0.28 for AIRNow $PM_{2.5}$ and MODIS AOD, respectively. Both mean distributions show elevated (above their respective weighted national mean) aerosols in the Central and South Eastern US, Los Angeles and Salt Lake City with generally low aerosols (below their respective weighted national mean) in the Northeastern US and Western Washington. MODIS shows relatively high mean AOD for the AIRNow sites in Eastern Washington while the mean surface $PM_{2.5}$ measurements remain low in spite of the large aerosol loading associated with the fires in the Northwest. This difference can be understood since aerosol loading in this region was likely transported above the boundary layer and therefore not sampled by the AIRNow surface sites. Similar influences of lofted aerosol loading are evident in Eastern Michigan and the Minneapolis-St. Paul metropolitan area where MODIS measured relatively high mean AOD but the mean AIRNow $PM_{2.5}$ measurements are generally low.

Figures 10a and 10b show site-by-site distribution of the standard deviation of the coincident AIRNow $PM_{2.5}$ and MODIS AOD measurements for September 2003. The September 2003 weighted national average standard deviation is $6.6\mu g/m^3$ and 0.16 for AIRNow $PM_{2.5}$ and MODIS AOD, respectively. Both $PM_{2.5}$ and AOD show relatively high (above the weighted national average) standard deviations throughout the central and south central US, consistent with the standard deviation of the 40 km binned MODIS AOD (Figure 7). The $PM_{2.5}$ measurements show very high ($>25\mu g/m^3$) standard deviations for an individual AIRNow site in Los Angeles that is not present in the AOD measurements. The standard deviation at this highly urbanized site reflects very localized variability and is significantly larger than the mean $PM_{2.5}$ at this site during September 2003. The MODIS AOD shows relatively high standard deviations at sites in Eastern Washington, Chicago, and Alabama. These high standard deviations most likely reflect variability associated with lofted aerosol loading since they are not as pronounced in the surface $PM_{2.5}$ standard deviations.



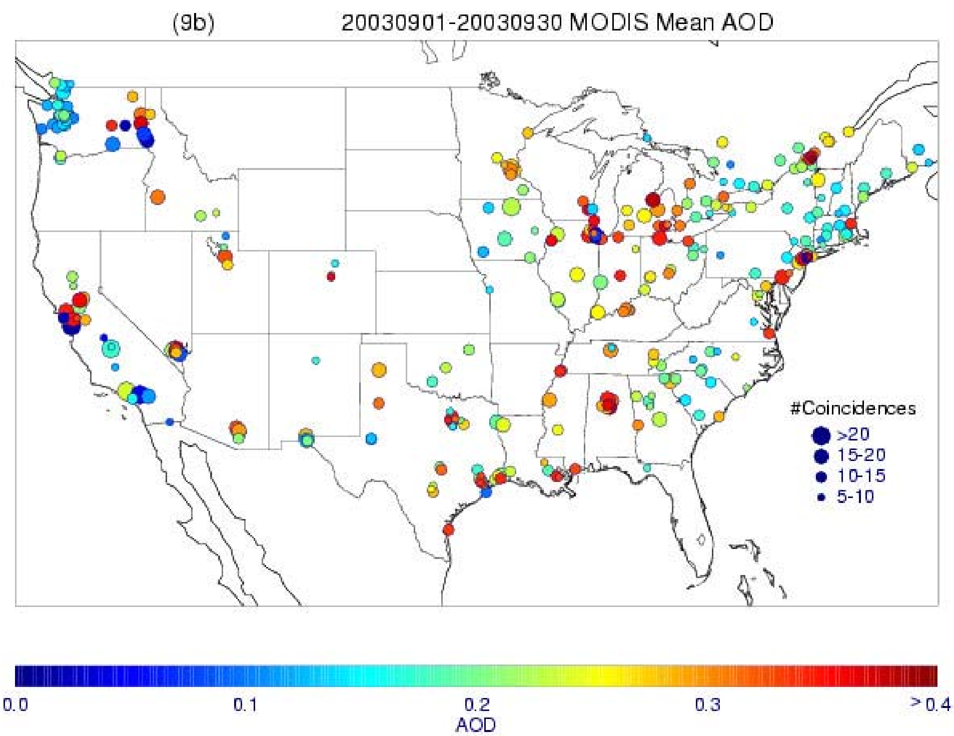


Figure 9. Site-by-site distribution of mean AIRNow $PM_{2.5}$ (9a) and MODIS AOD (9b) for September 2003.

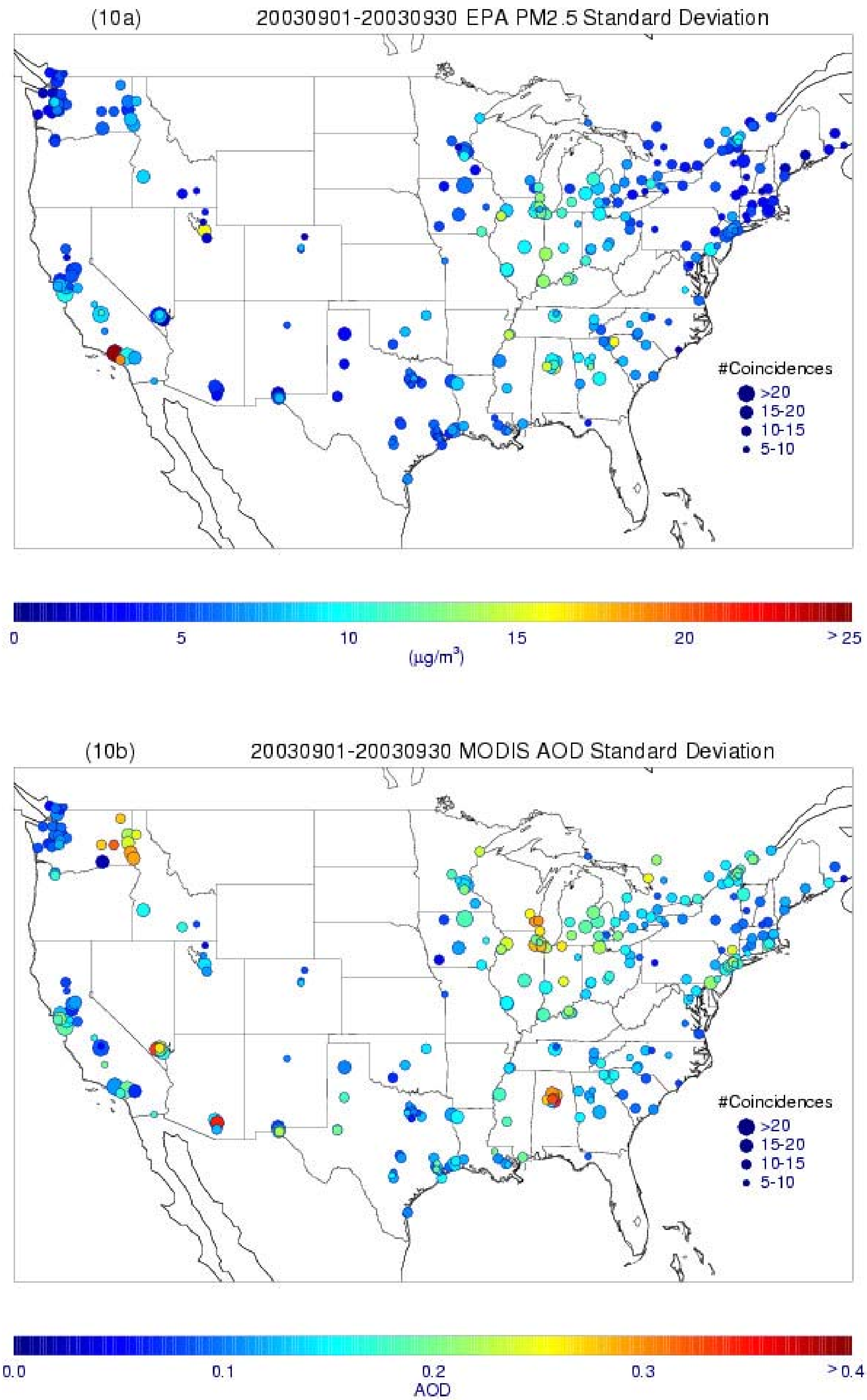


Figure 10. Site-by-site distribution of AIRNow $PM_{2.5}$ (10a) and MODIS AOD (10b) standard deviations for September 2003.

4.3 Regional spatial statistics

The comparison of maps of AIRNow $PM_{2.5}$ and MODIS AOD site-by-site mean and standard deviation statistics shows that MODIS AOD can provide useful qualitative information about the spatial distribution of mean surface $PM_{2.5}$ during September 2003. However, there is significant site-to-site variation in the agreement between the mean $PM_{2.5}$ and AOD measurements. To quantify the spatial information content in the mean MODIS AOD we consider the correlations between site-by-site means and standard deviations within each of the EPA regions. Figure 11 shows a map of the EPA regions. Only continental US regions were considered in this analysis.

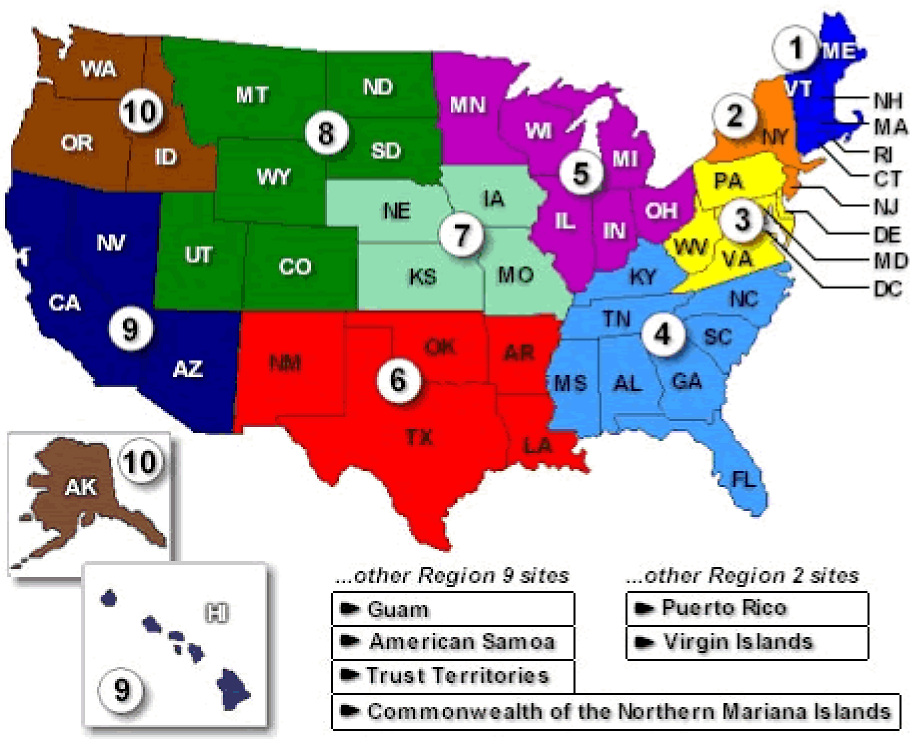


Figure 11. Map of EPA Regions 1-10.

Figure 12 is an example of the spatial correlations between means and standard deviations of MODIS AOD and $PM_{2.5}$ measurements for each AIRNow site within EPA regions 4 and 5 during September 2003. These regions have been combined so that the spatial information content of the MODIS AOD within the high aerosol loading over the Central and South-Central US can be quantified. (Appendix C summarizes the spatial correlations between AOD and $PM_{2.5}$ means and standard deviations for each individual EPA region.) The spatial correlation between the mean AOD and $PM_{2.5}$ within EPA region 4 and 5 is low (~0.25). The spatial correlation between the AOD and $PM_{2.5}$ standard deviations within EPA region 4 and 5 is somewhat higher (~0.4). In general, the spatial correlations within EPA regions are significantly lower than the site-by-site

temporal correlations shown in Figure 4. For example, the EPA region 4 and 5 weighted average of the site-by-site temporal correlations shown in Figure 4 is 0.59 during September 2003, which is over twice as high as the mean spatial correlation.

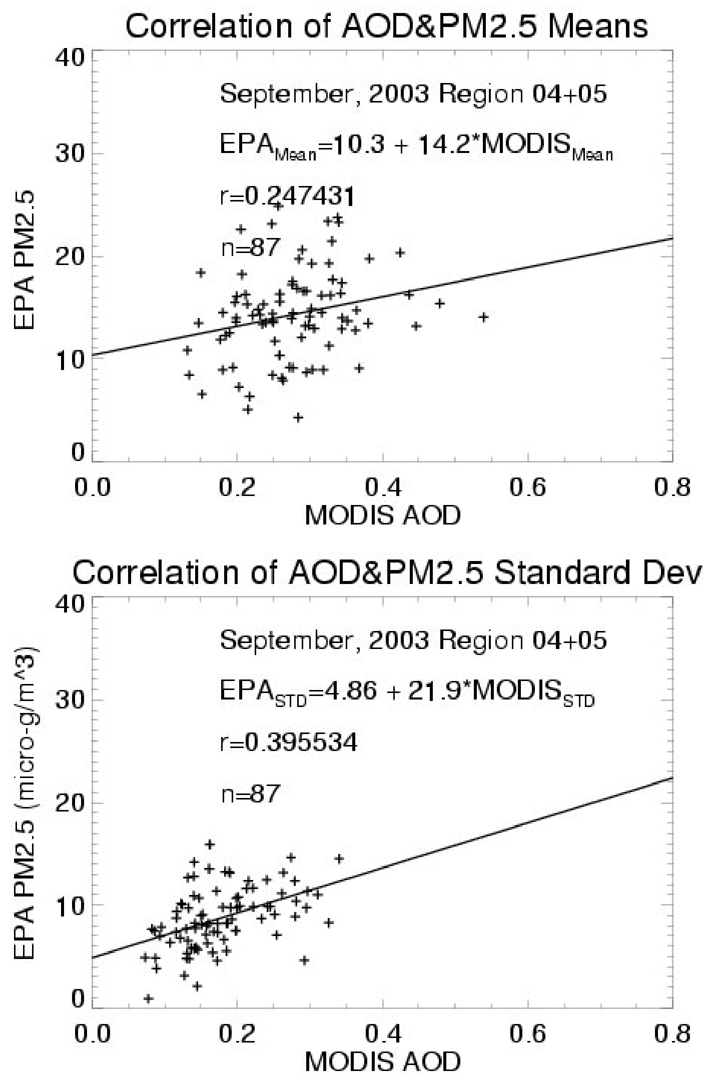


Figure 12. Spatial correlations between means and standard deviations of MODIS AOD and $PM_{2.5}$ measurements for each AIRNow site within EPA regions 4 and 5.

5.0 Conclusion

This technical evaluation of the relationship between AIRNow surface $PM_{2.5}$ and satellite-observed AOD for a pilot study period of September 2003 indicates that MODIS AOD provides a daily, national perspective on atmospheric column aerosol loading which complements the AIRNow network by filling in gaps in the surface $PM_{2.5}$ network.

In addition, changes from day to day in the national perspective (MODIS AOD) provide insight into transport of aerosol, both laterally across the continent, and vertical ascent or descent. Good quantitative correlations with MODIS AOD and AIRNow surface $PM_{2.5}$ are found when the aerosol is mostly in the boundary layer. Poorer quantitative results occur when the aerosol is lofted. Consequently, we have recommended that the MODIS Science Team devise a parameter to indicate the approximate vertical location of the aerosol (likelihood that the aerosol is near the surface or lofted) based on the meteorology and physics of the retrieval.

Generally high agreement between MODIS AOD and AIRNow $PM_{2.5}$ is found for the hourly data. However, MODIS AOD provides only qualitative information about the mean spatial distribution of surface $PM_{2.5}$ during September 2003. The discrepancy between the generally high temporal correlations and generally low mean spatial correlations arises because the spatial statistics are influenced by site-to-site variations in the aerosol composition and the altitude of the aerosol loading, both of which lead to different mean AOD/ $PM_{2.5}$ ratios. When these different mean $PM_{2.5}$ /AOD ratios are combined into regional spatial correlations, the overall correlation decreases. In contrast, site-by-site background aerosol composition appears to be relatively constant during September 2003, so that significant events like the long-range transport of the smoke from the Northwestern wild fires result in episodic increases in both surface $PM_{2.5}$ and AOD which are strongly correlated in time, even though individual sites have a different background relationship between AOD and $PM_{2.5}$.

Acknowledgements

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EDAS
http://www.arl.noaa.gov/ss/transport/edas.html

http://wwwt.emc.ncep.noaa.gov/modelinfo/
ftp://tgftp.nws.noaa.gov

EPA Clean Air Act
http://www.epa.gov/oar/caa/contents.html

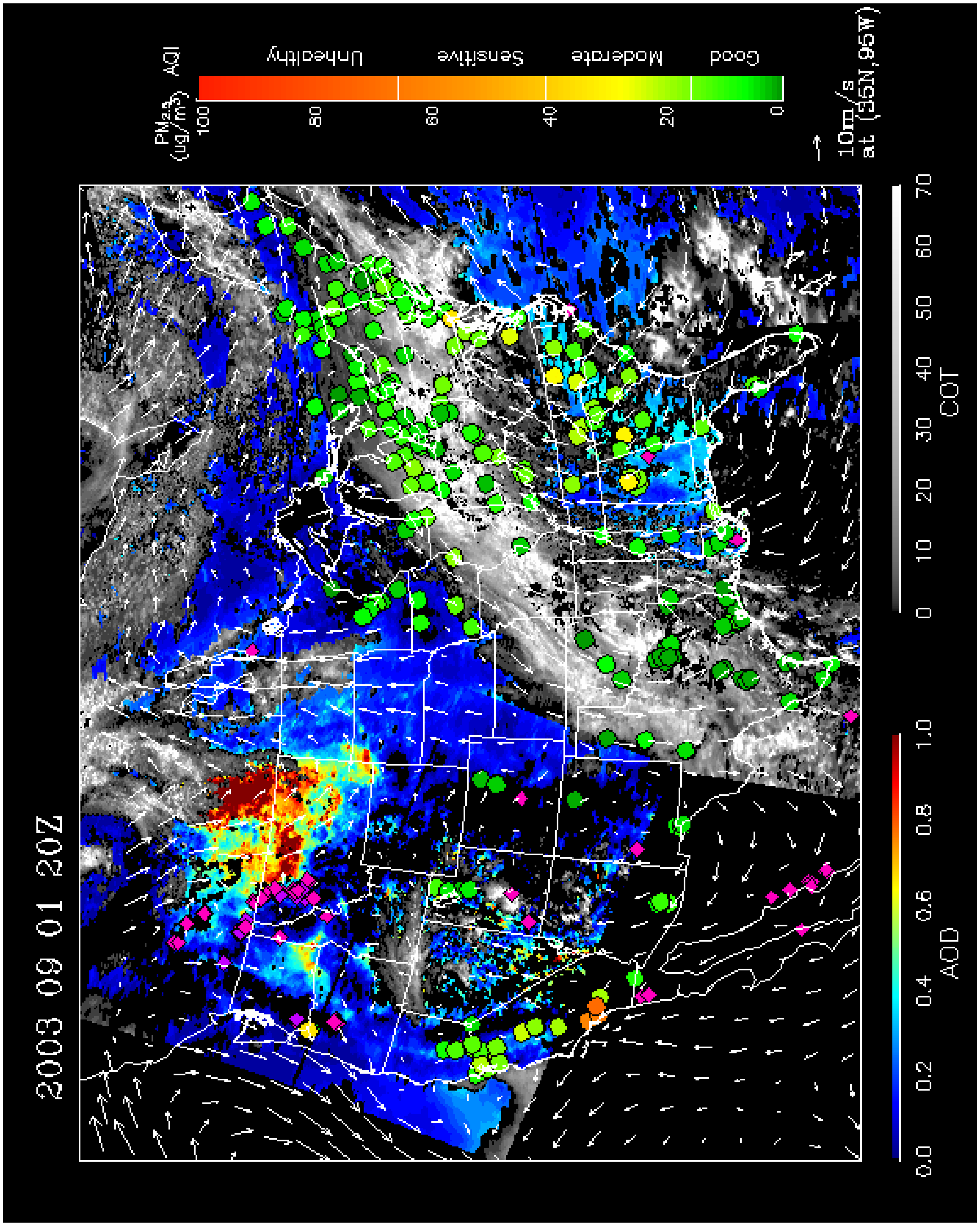
GOES
http://orbit-net.nesdis.noaa.gov/arad/fpdt/goescat_v4/html/GOES_I_1_overview.html

MODIS
http://modis.gsfc.nasa.gov

WF_ABBA
http://cimss.ssec.wisc.edu/goes/burn/abba.html

Appendix A

Daily Satellite and EPA In-Situ Fusion National Maps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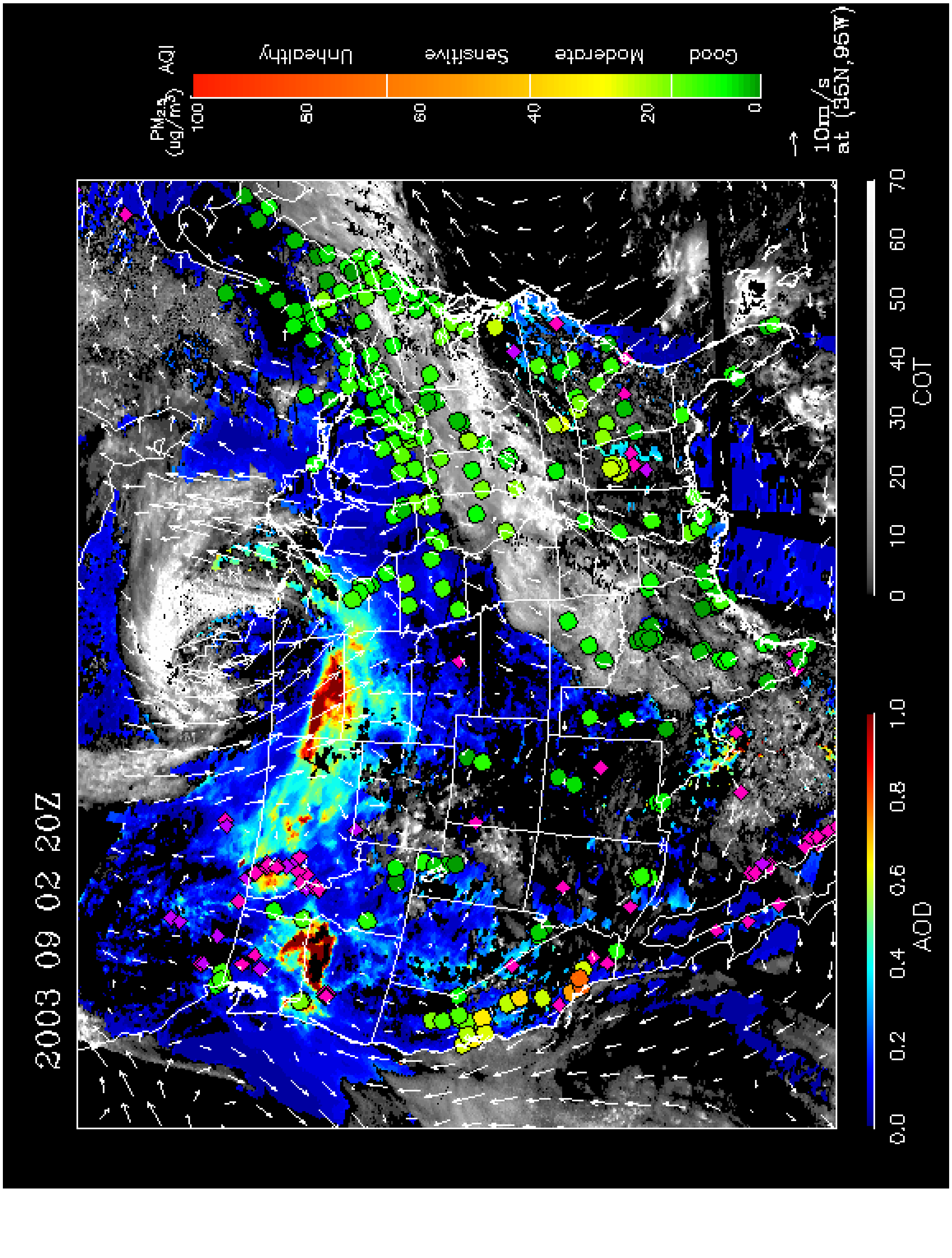
0.0
0.2
0.4
0.6
0.8
1.0
COT
0
10
20
30
40
50
60
70
PM2.5 (ug/m3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s
at (35N,95W)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0.2
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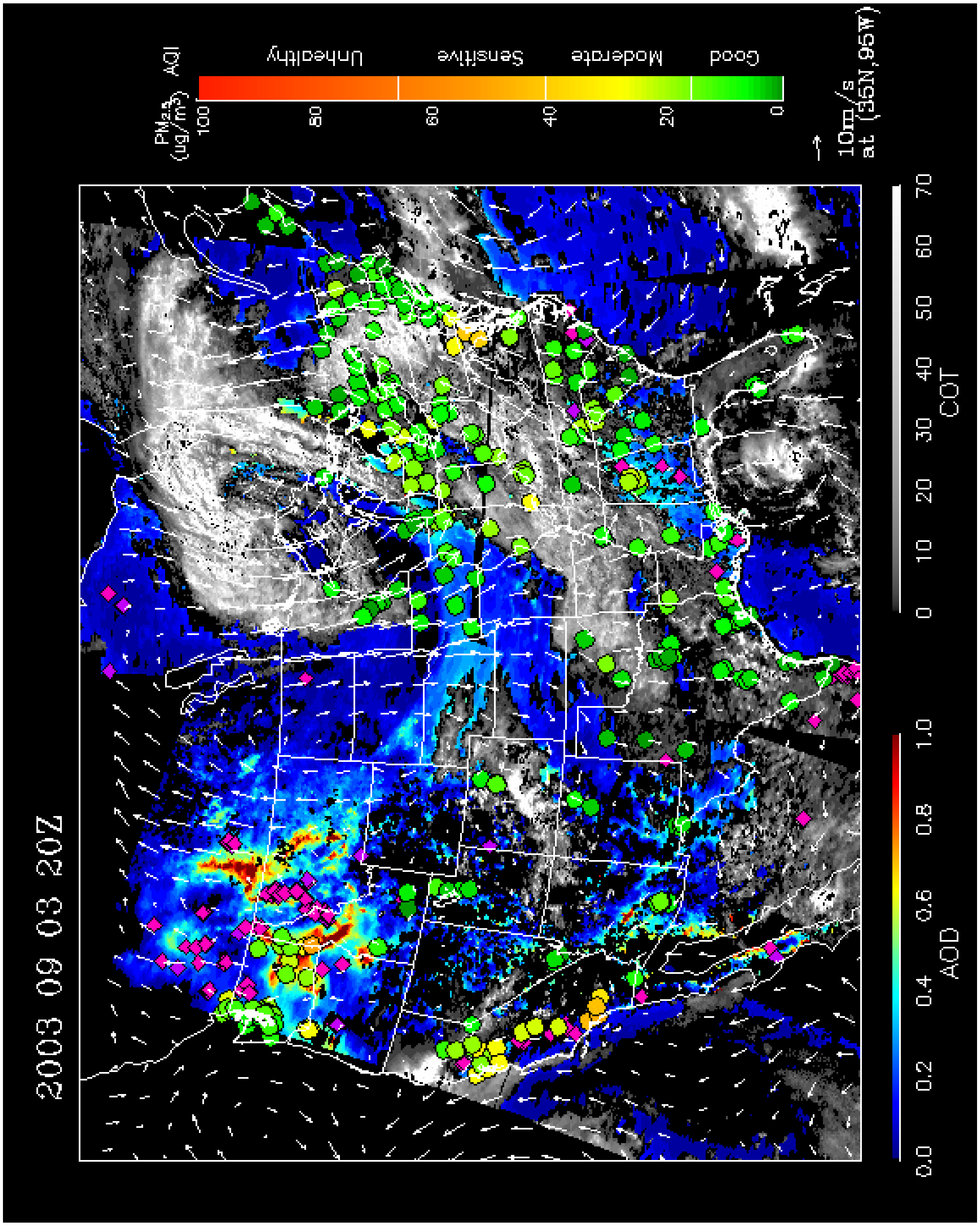
0.6
0.8
1.0
COT
0
10
20
30
40
50
60
70
$PM_{2.5}$ (ug/m³)
AQI
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)



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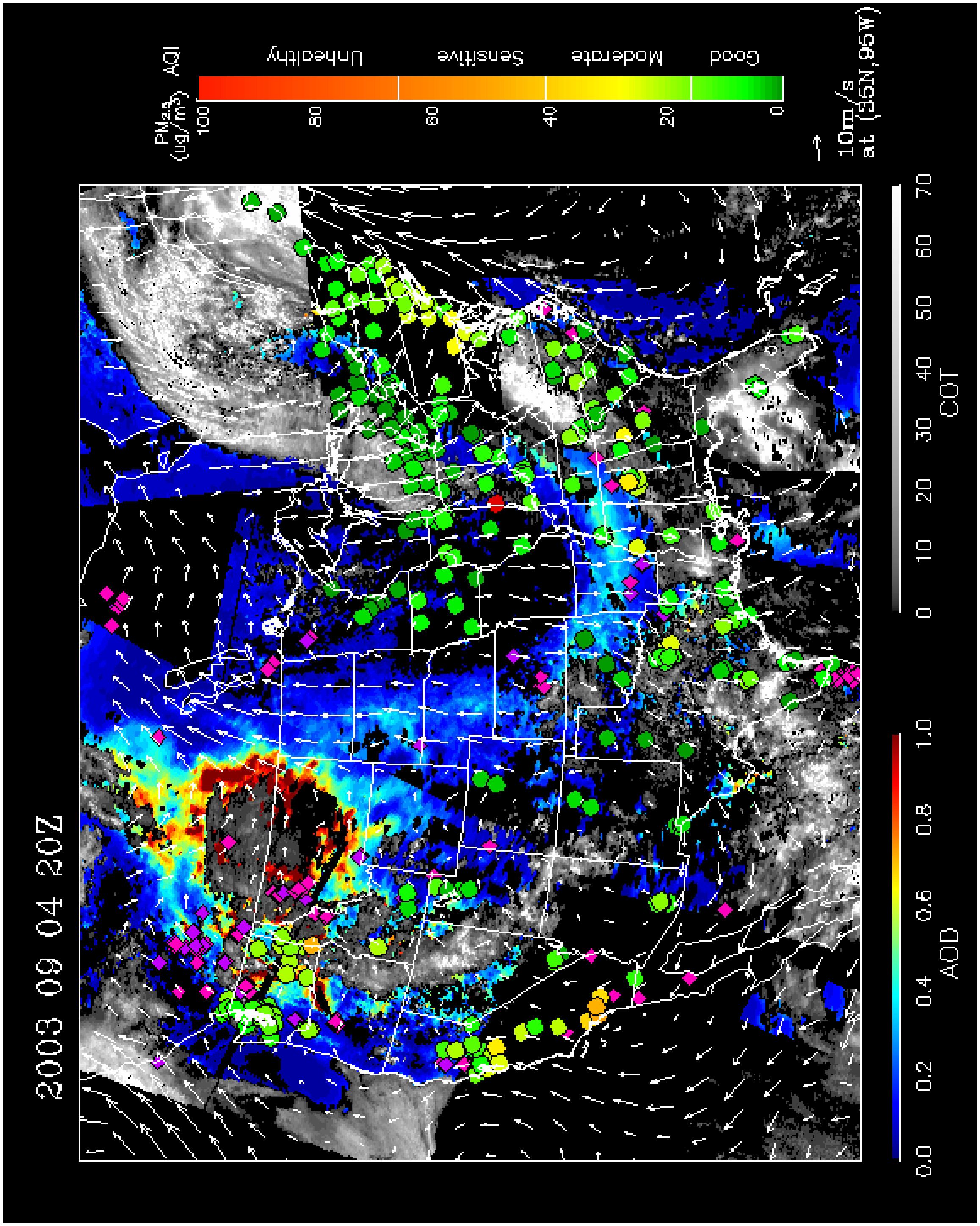
AOD
0 10 20 30 40 50 60 70
COT
PM2.5 (ug/m3)
AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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COT
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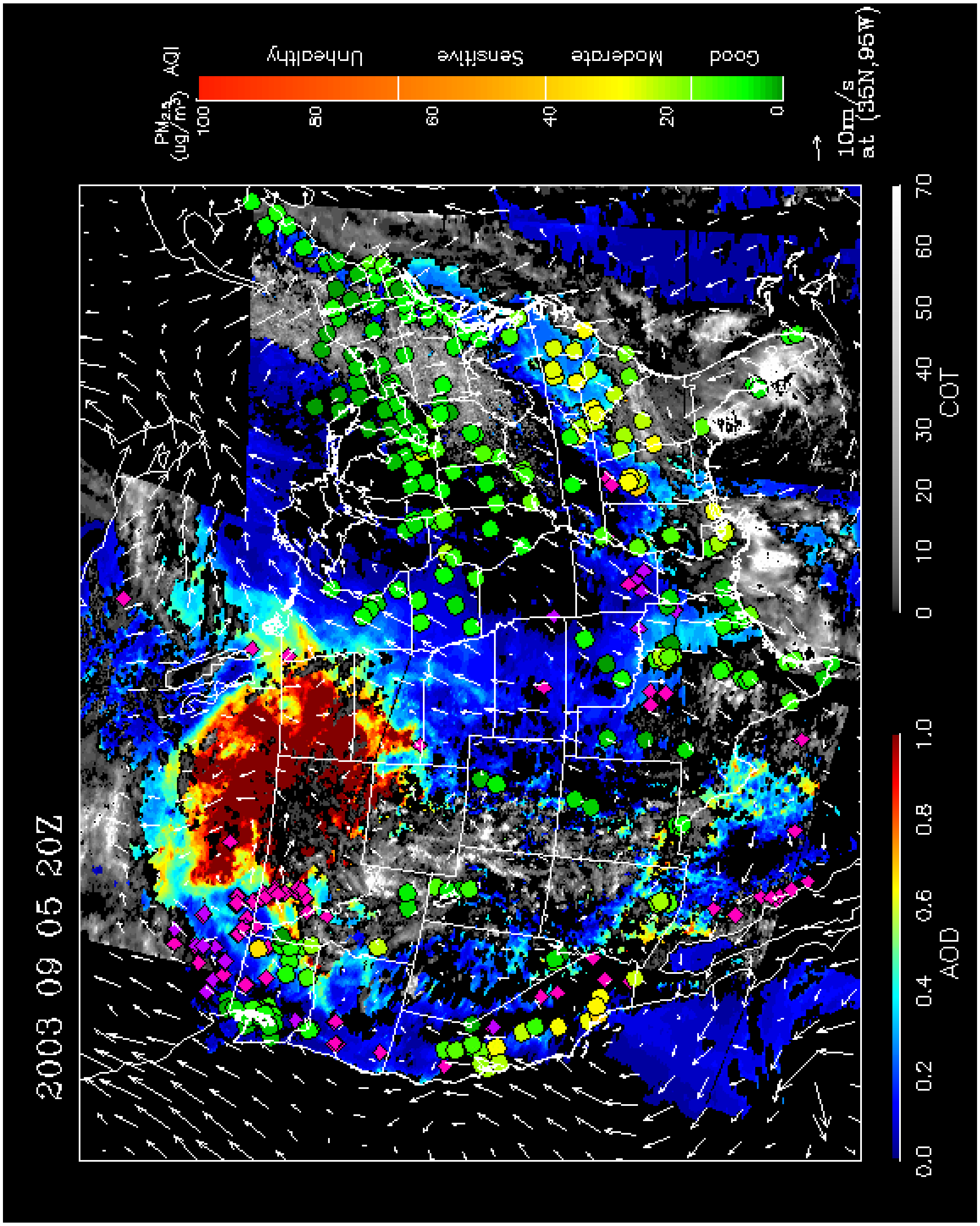
PM2.5 (ug/m3)
AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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COT
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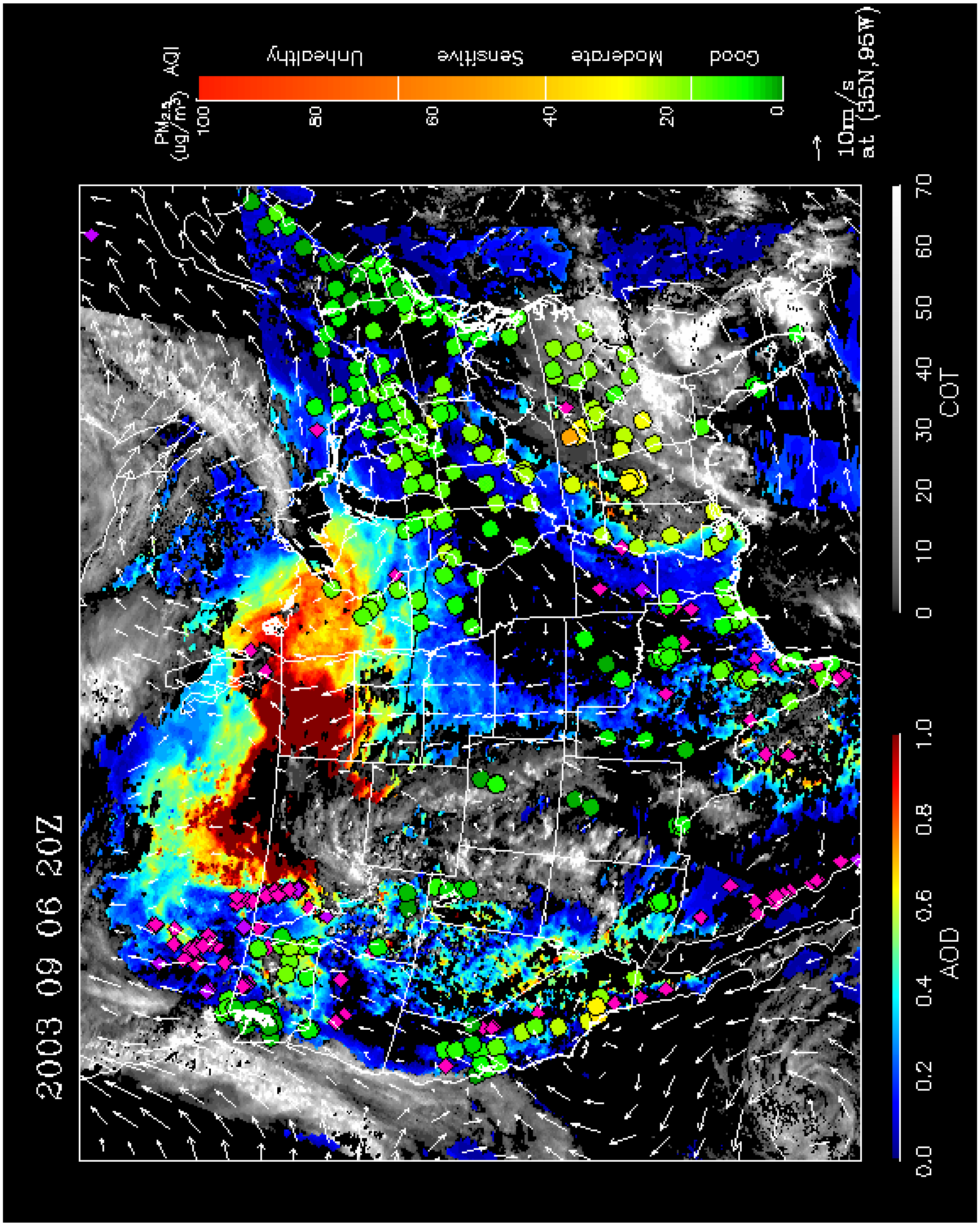
PM2.5 (ug/m3)
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)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COT
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PM2.5 (ug/m3)
AQI
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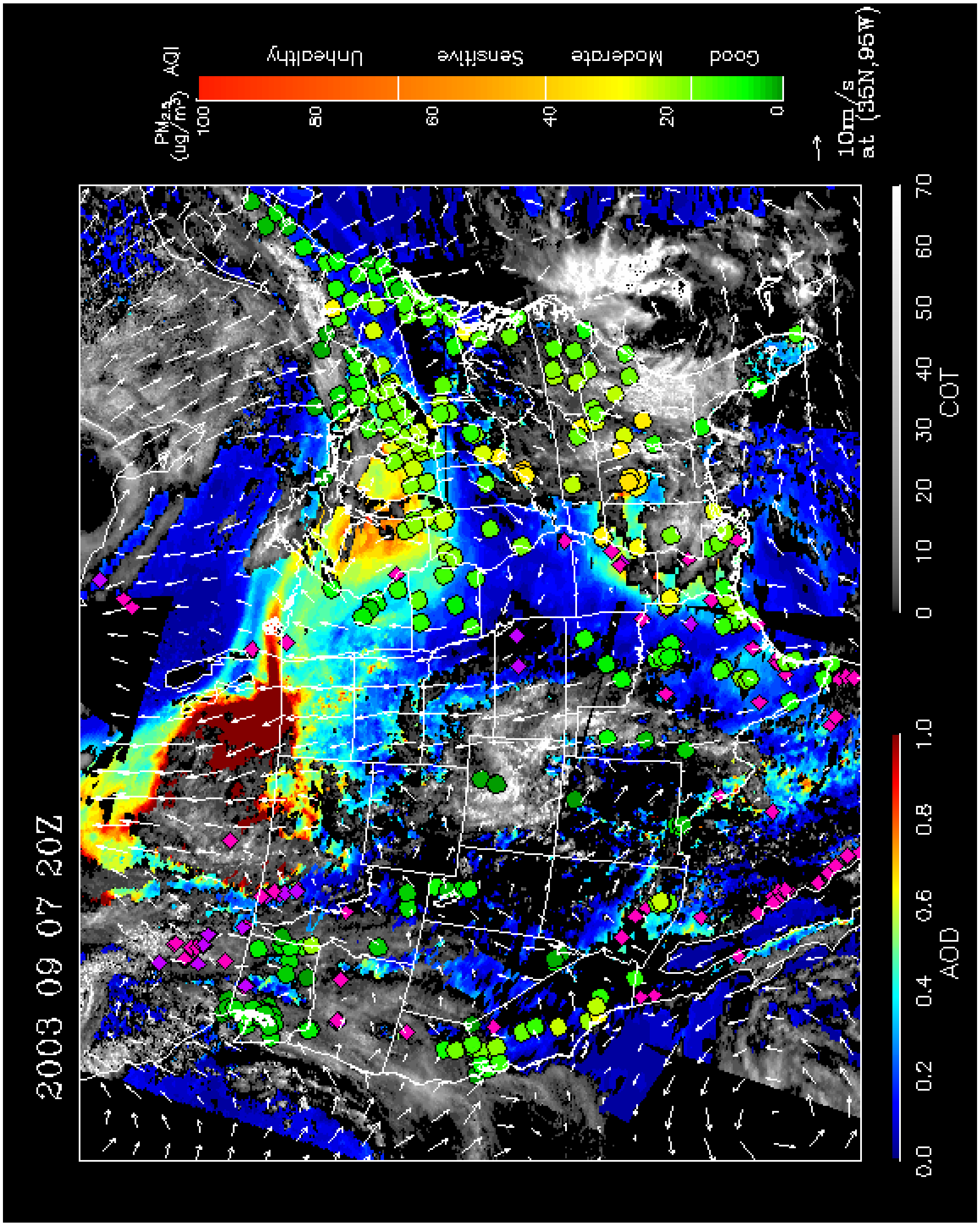
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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COT
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PM2.5 (ug/m3)
AQI
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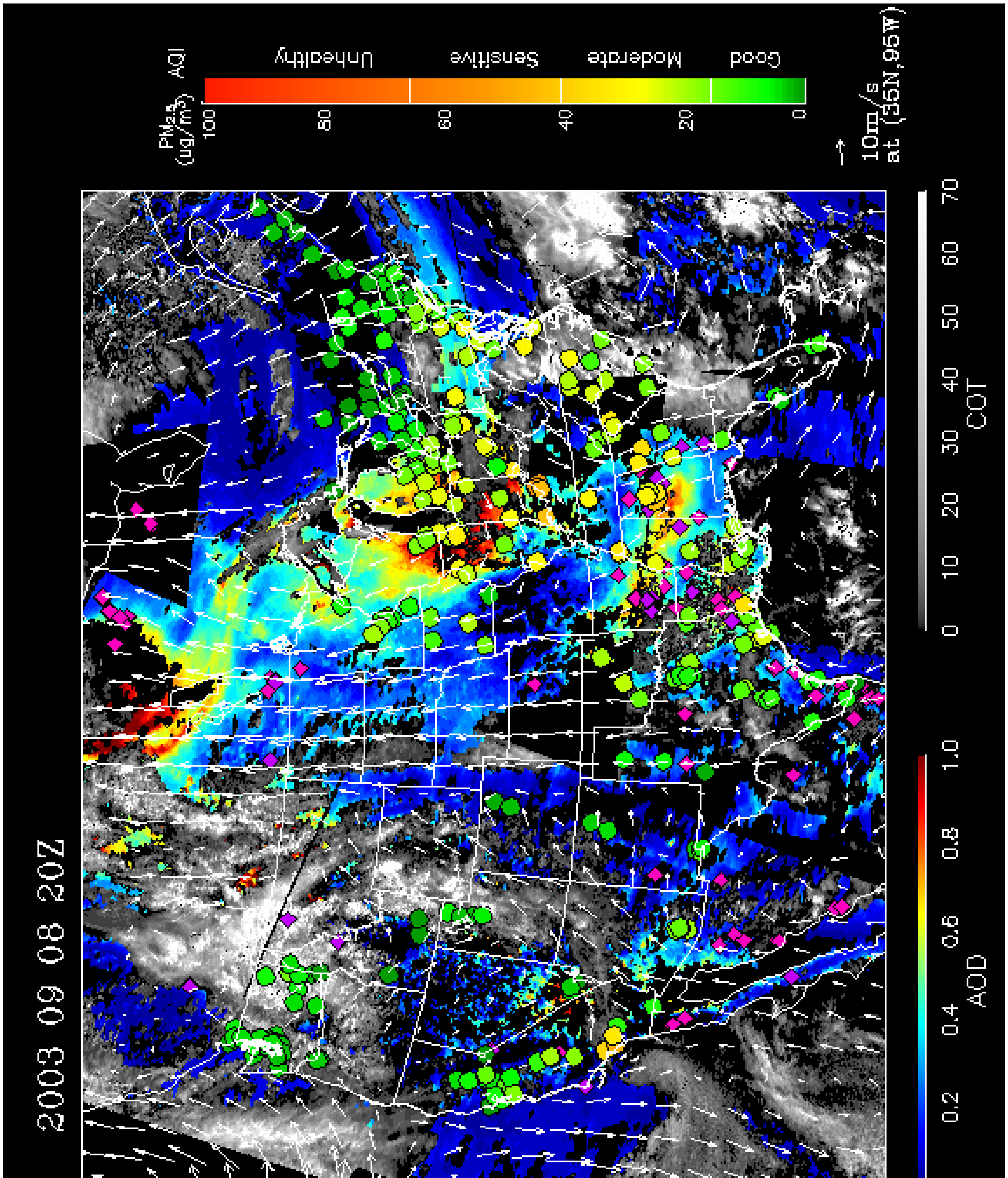
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)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0.4
0.6
0.8
1.0
AOD
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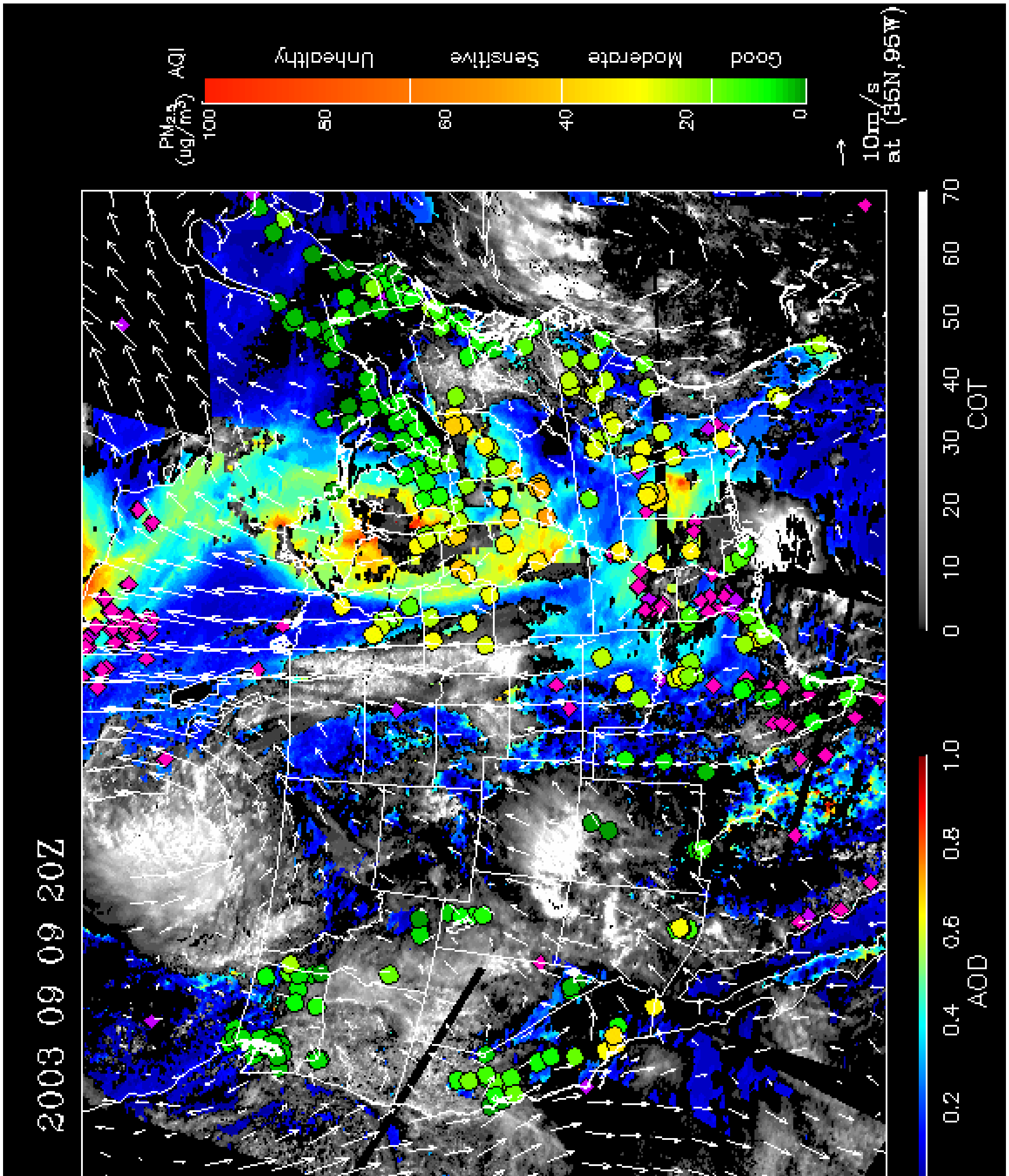
10
20
30
40
50
60
70
COT
PM2.5 (ug/m3)
AQI
0
20
40
60
80
100
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)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AOD
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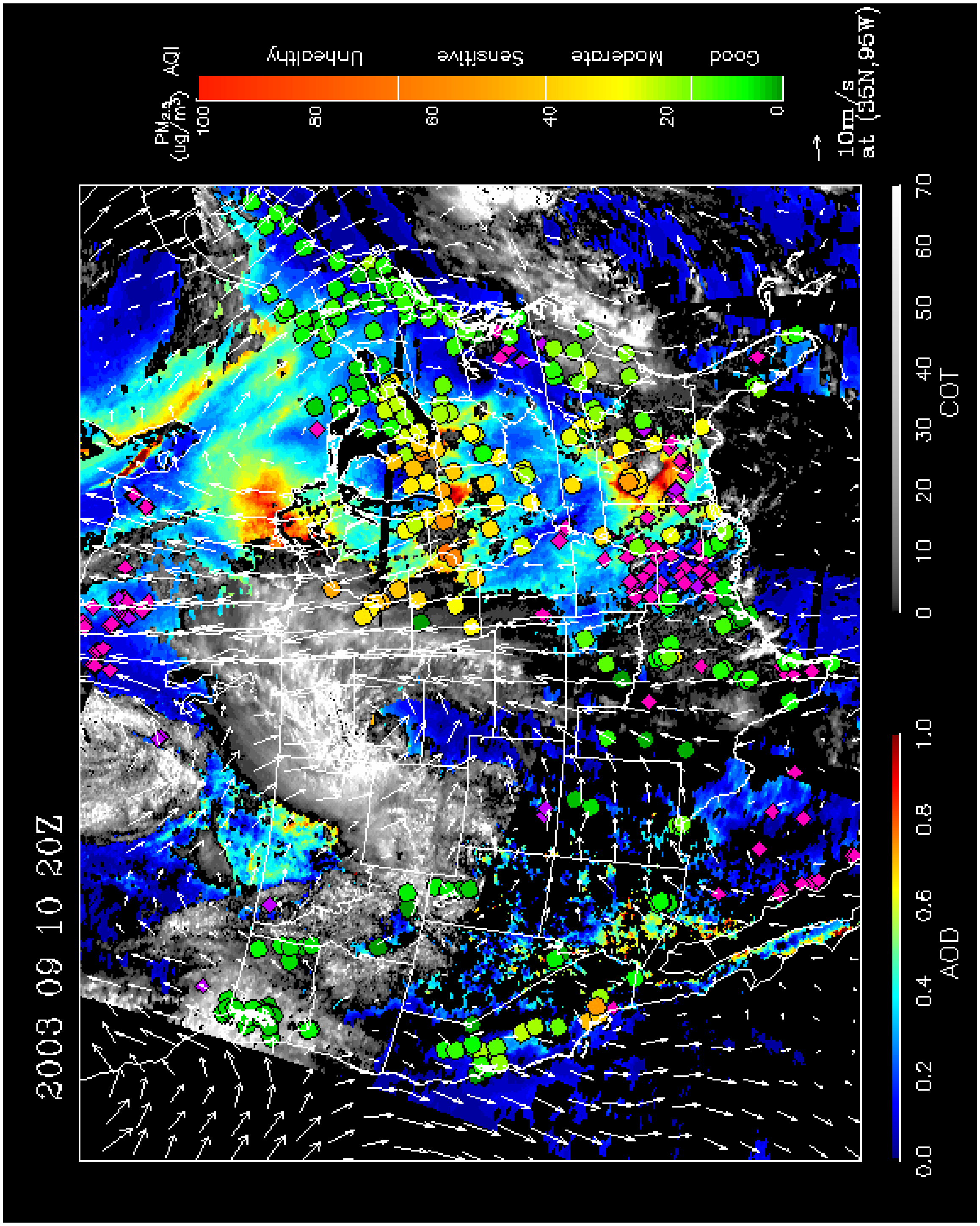
COT
PM2.5 (ug/m3)
AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s
at (35N,95W)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AOD
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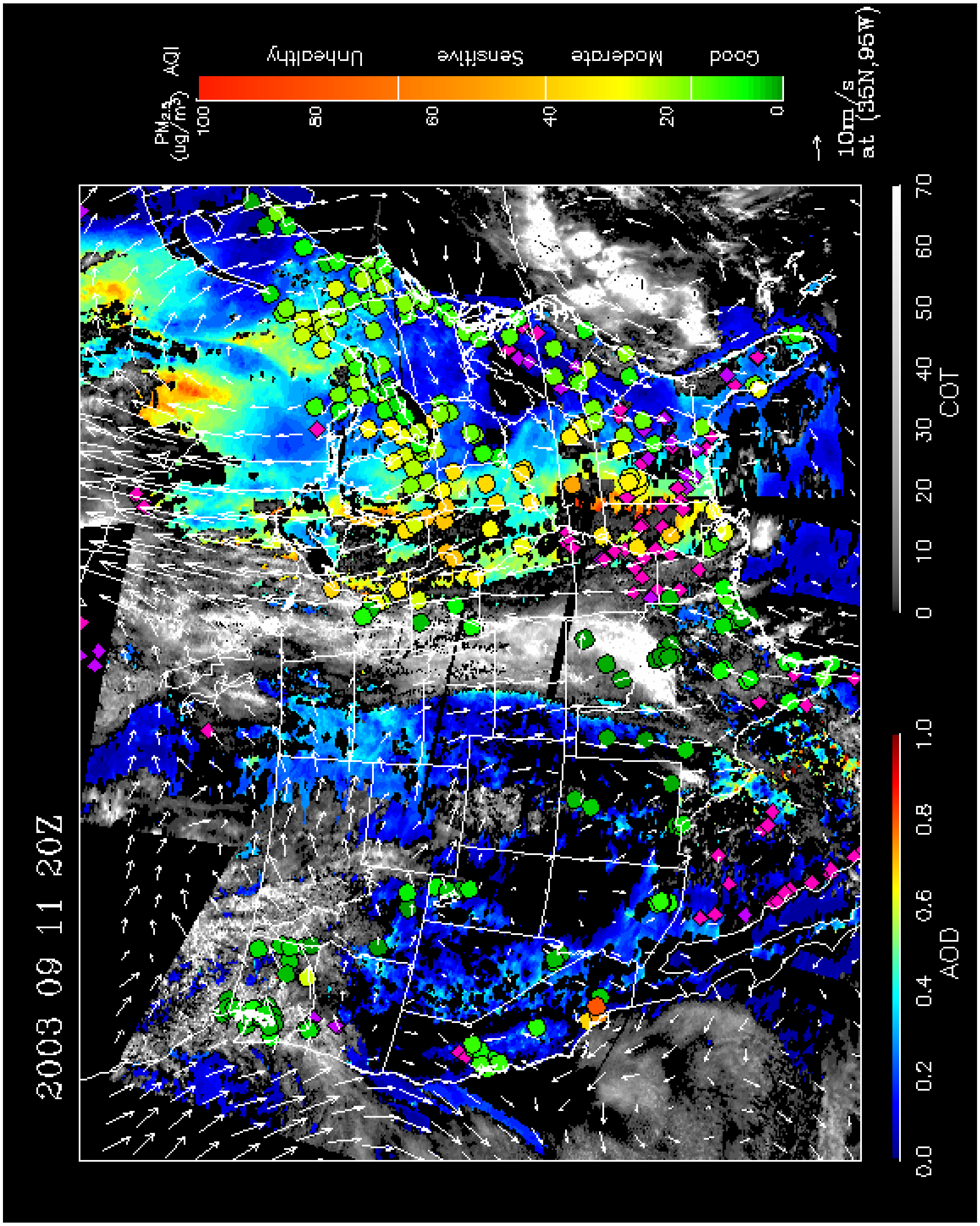
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)



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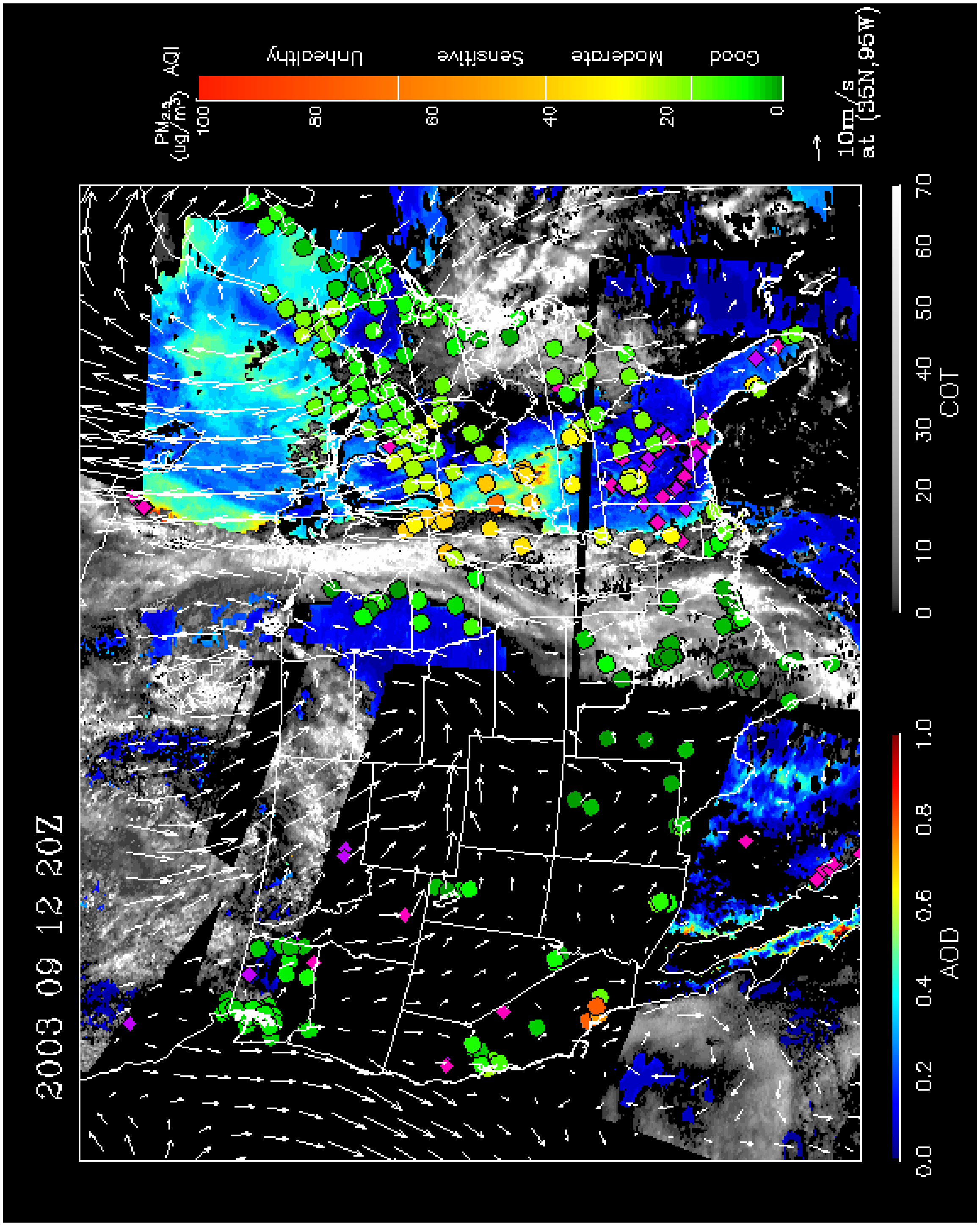
COT
0 10 20 30 40 50 60 70
PM2.5 (ug/m3)
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s
at (35N,95W)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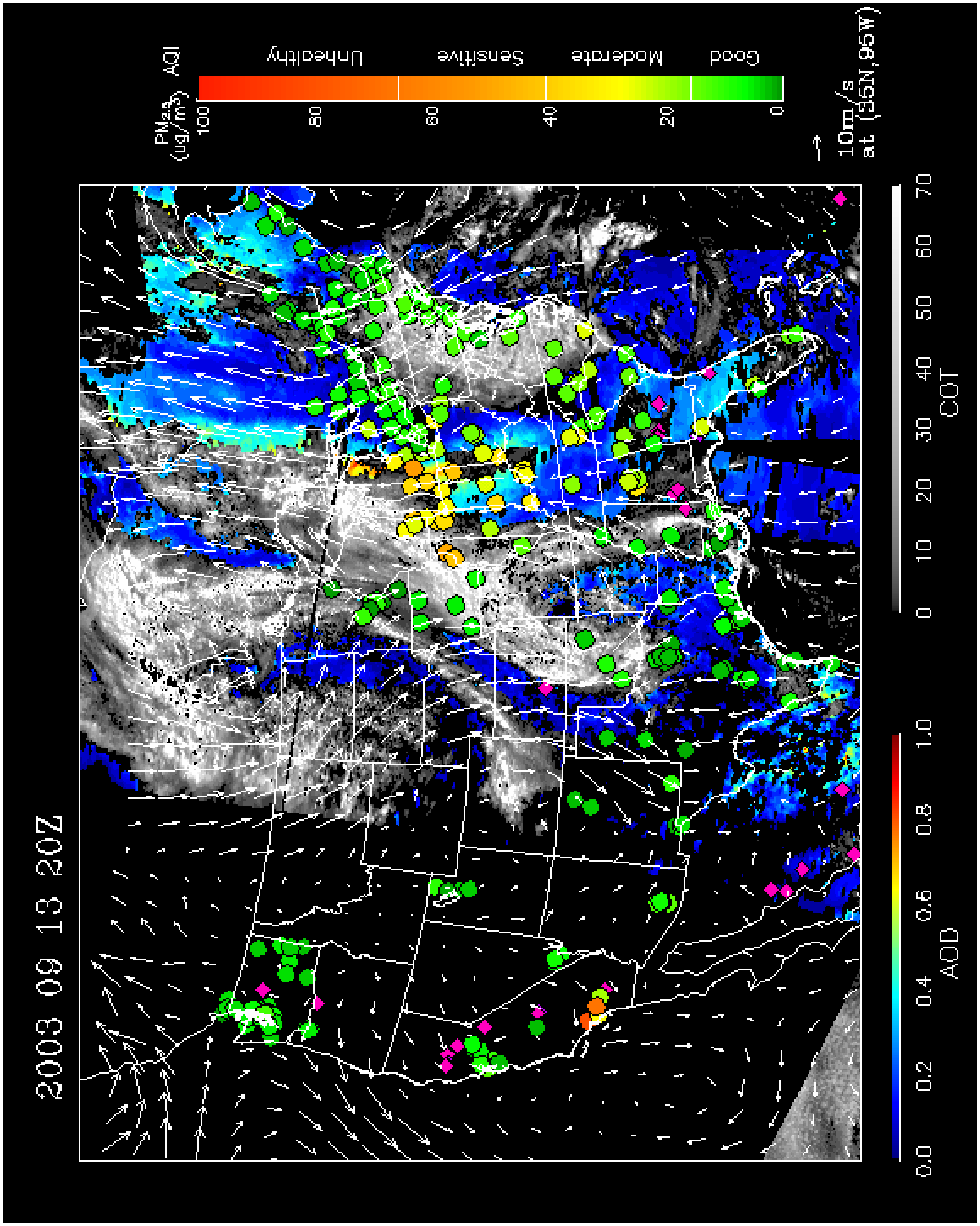
PM2.5 (ug/m3)
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s
at (35N,95W)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COT
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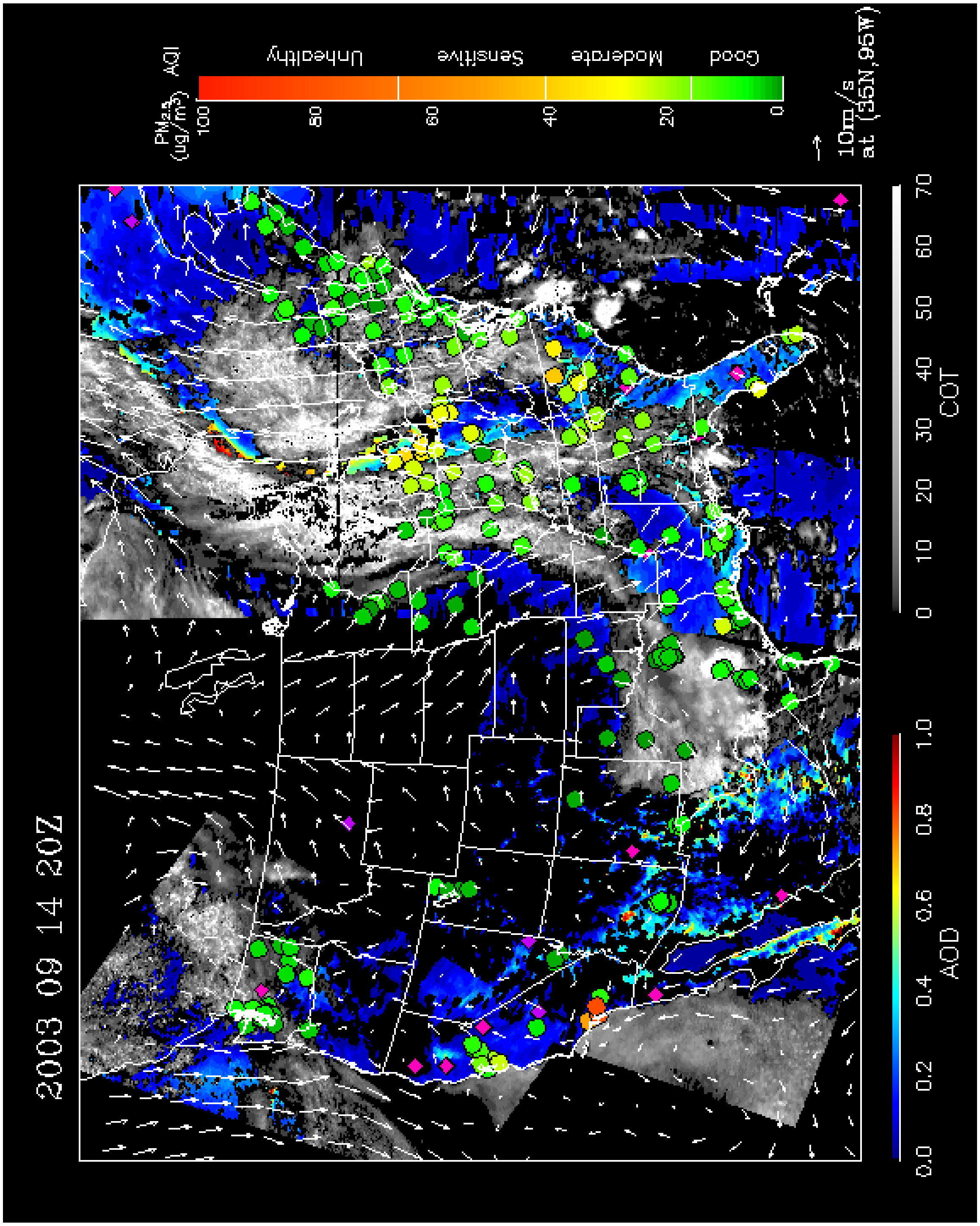
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)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COT
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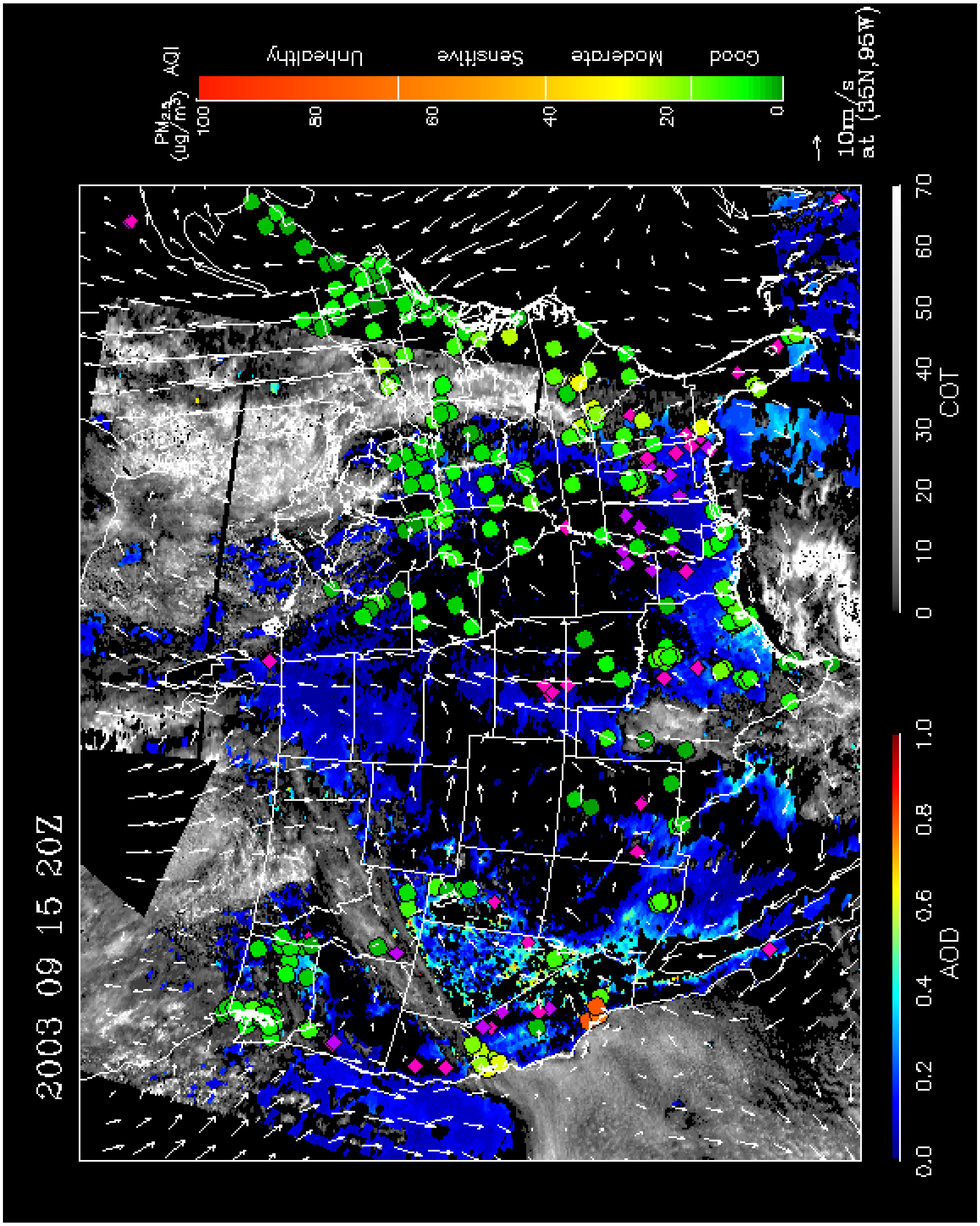
PM2.5 (ug/m3)
AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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0.2
0.4
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1.0
AOD
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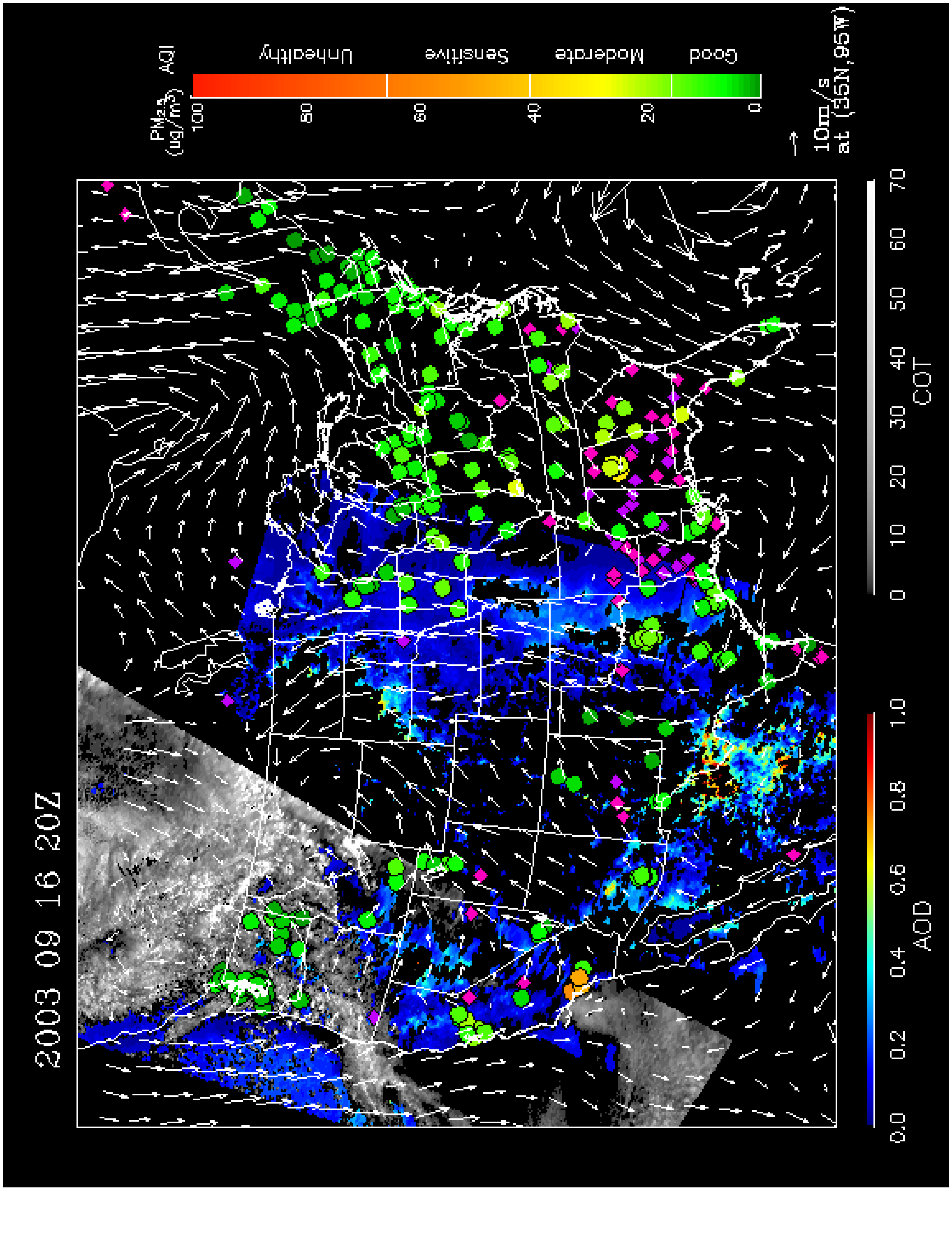
10
20
30
40
50
60
70
COT
PM2.5 (ug/m3)
AQI
0
20
40
60
80
100
Good
Moderate
Sensitive
Unhealthy
10m/s
at (35N,95W)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COT
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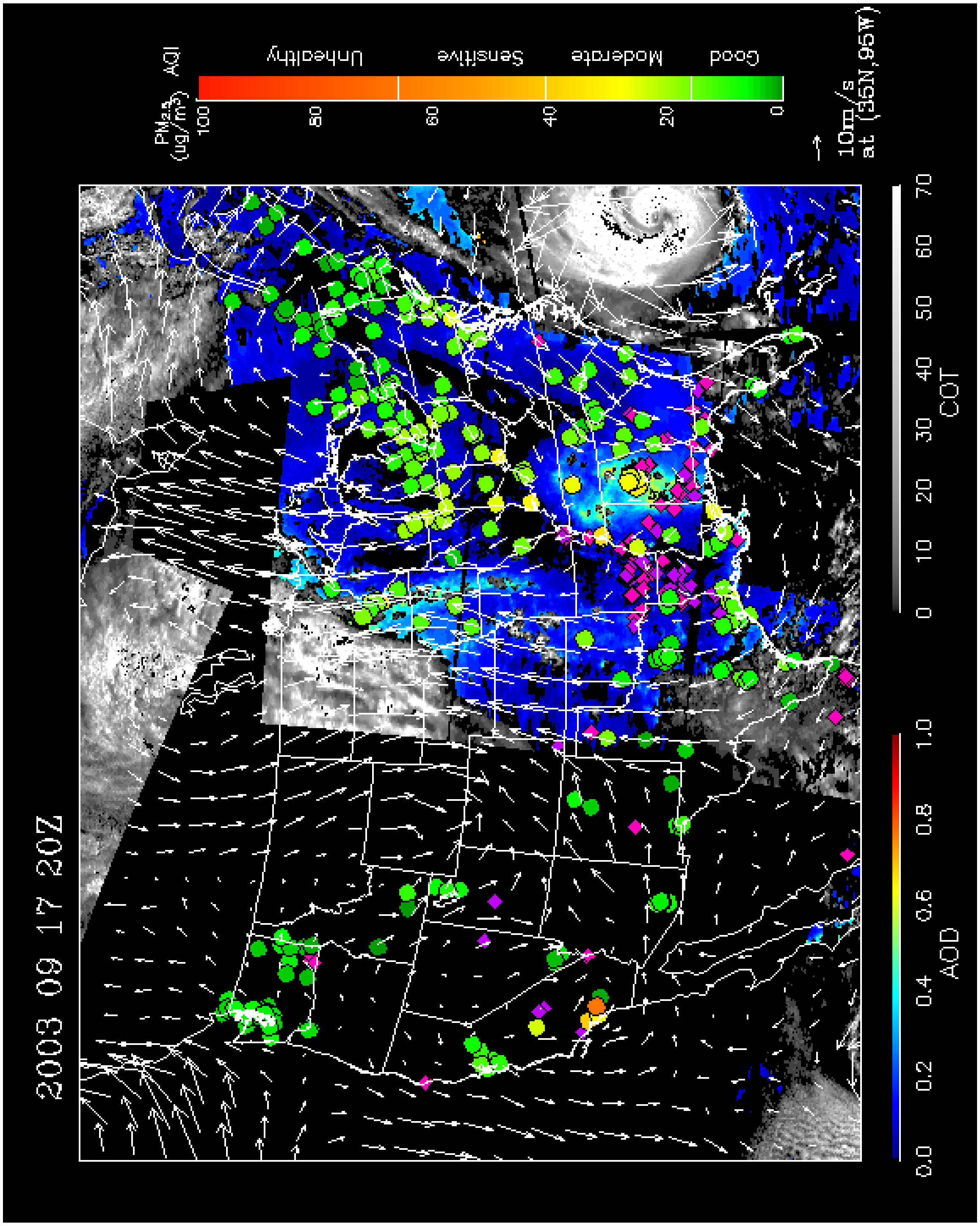
PM2.5 (ug/m3)
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)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COT
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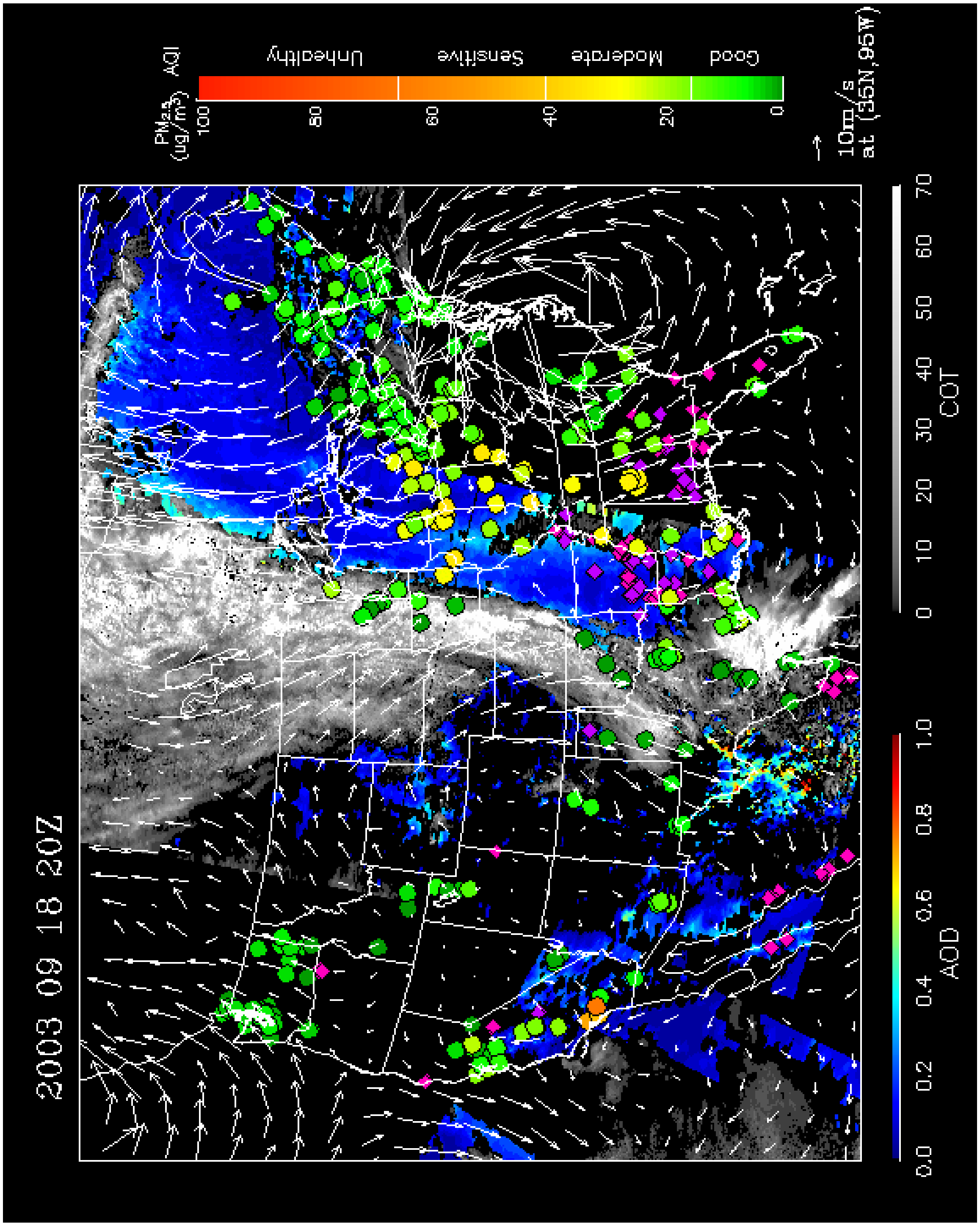
PM2.5 (ug/m3)
AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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COT
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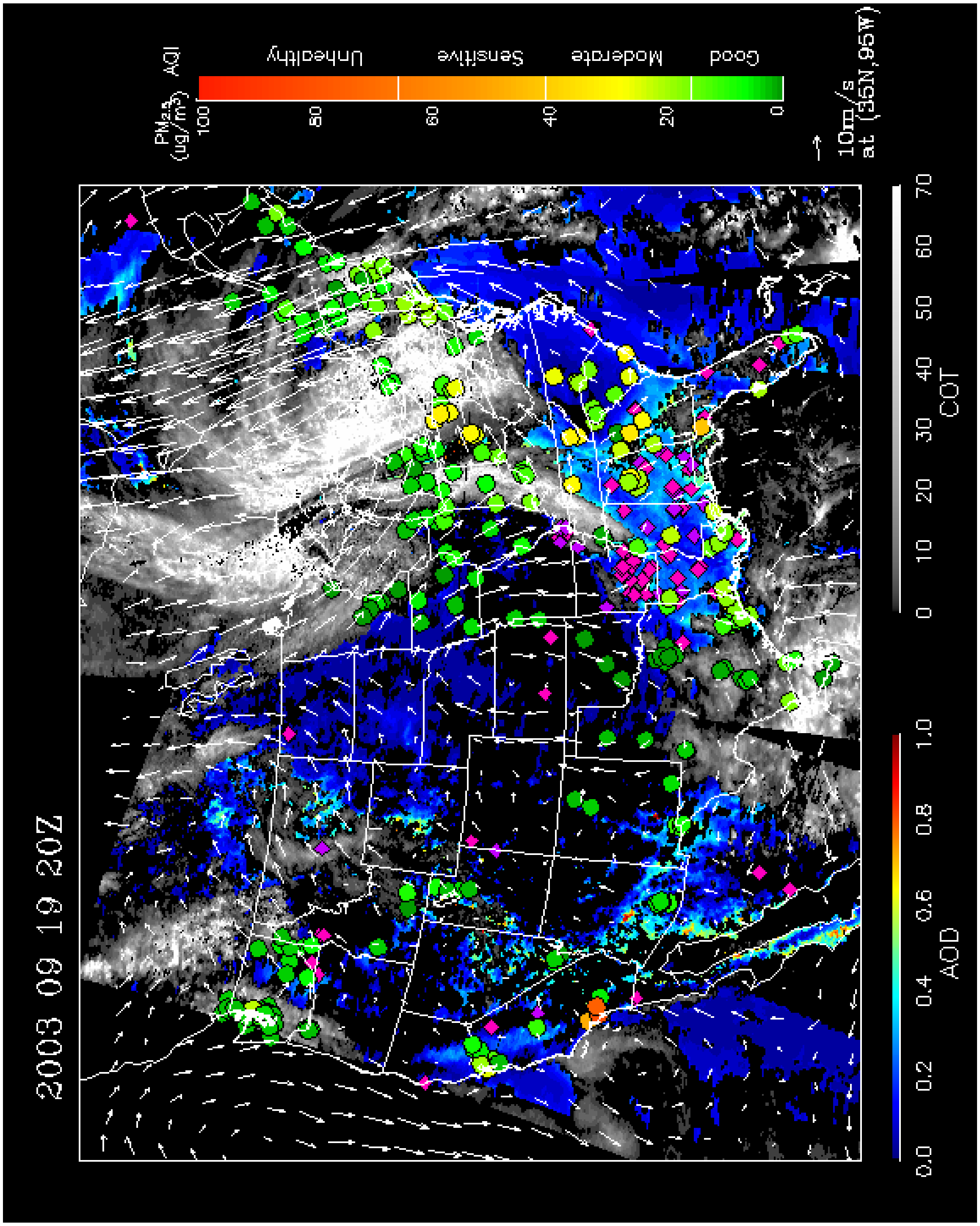
PM2.5 (ug/m3)
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s
at (35N,95W)



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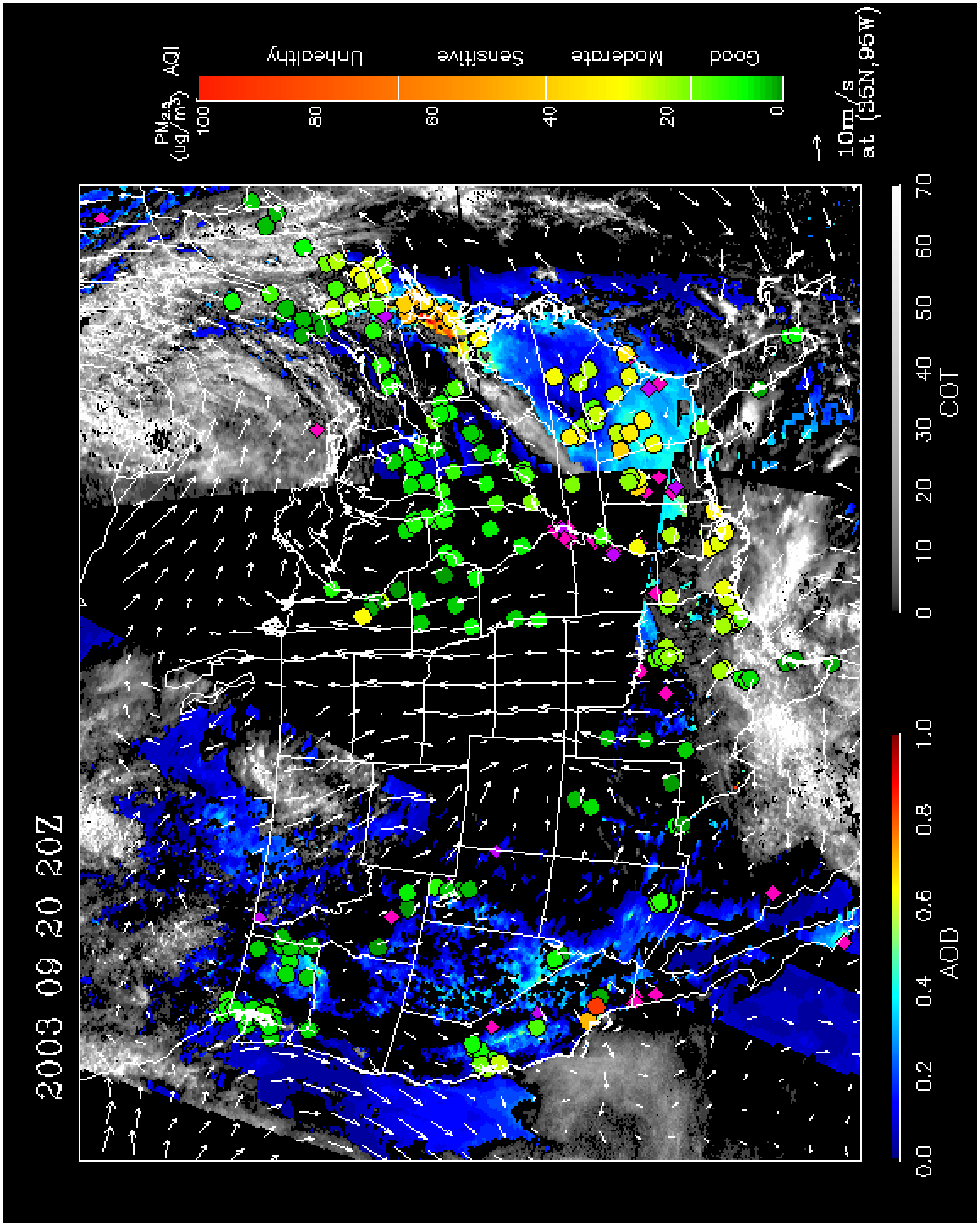
0.2
0.4
0.6
0.8
1.0
AOD
0
10
20
30
40
50
60
70
COT
PM2.5 (ug/m3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s
at (35N,95W)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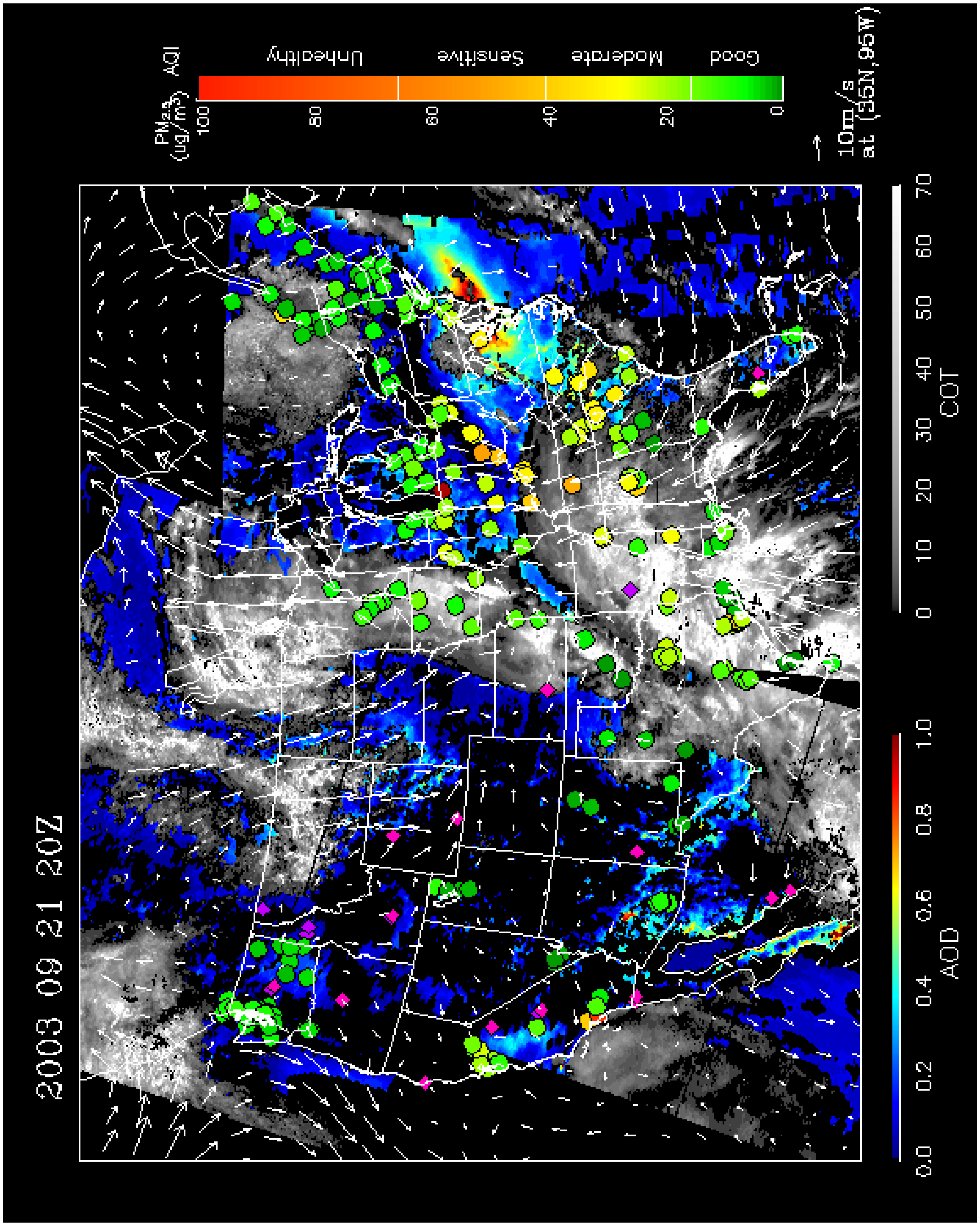
AOD
0.0 0.2 0.4 0.6 0.8 1.0
COT
0 10 20 30 40 50 60 70
$PM_{2.5}$ (ug/m^3)
AQI
0 20 40 60 80 100
Good
Moderate
Sensitive
Unhealthy
10m/s at (35N,95W)



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0.0
0.2
0.4
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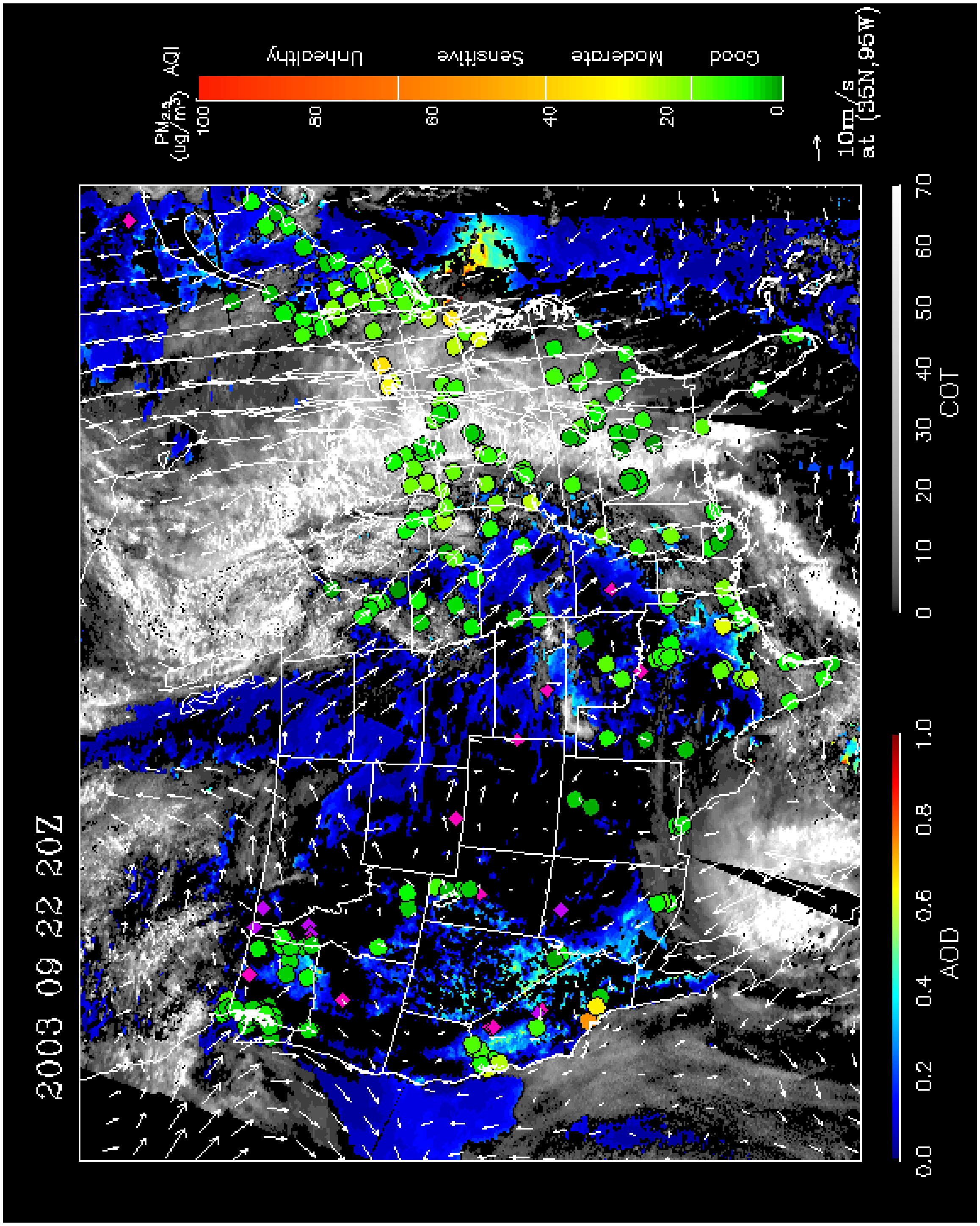
0.8
1.0
AOD
0
10
20
30
40
50
60
70
COT
$PM_{2.5}$ (ug/m^3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)



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AOD
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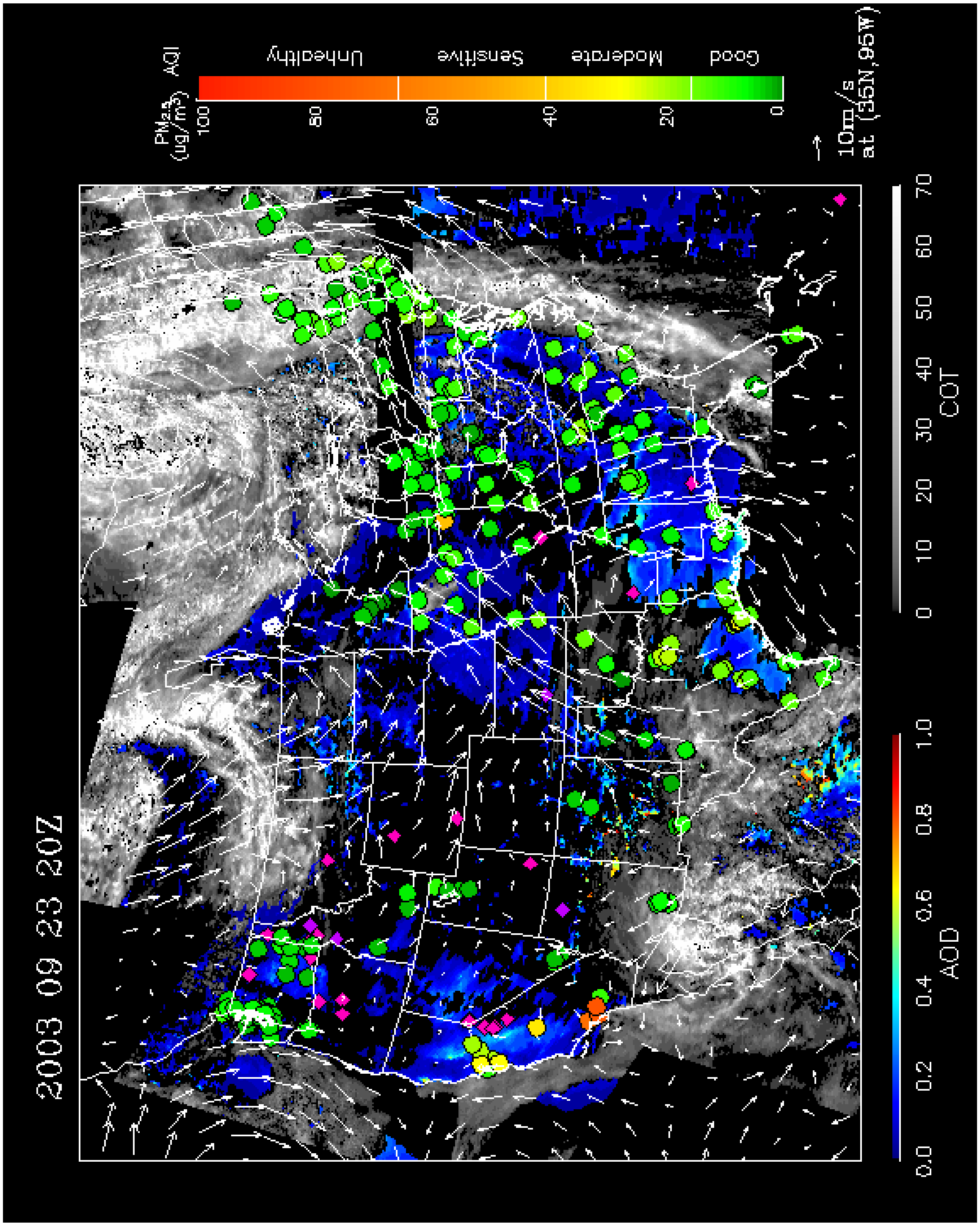
COT
PM2.5 (ug/m3) AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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COT
PM2.5 (ug/m3)
AQI
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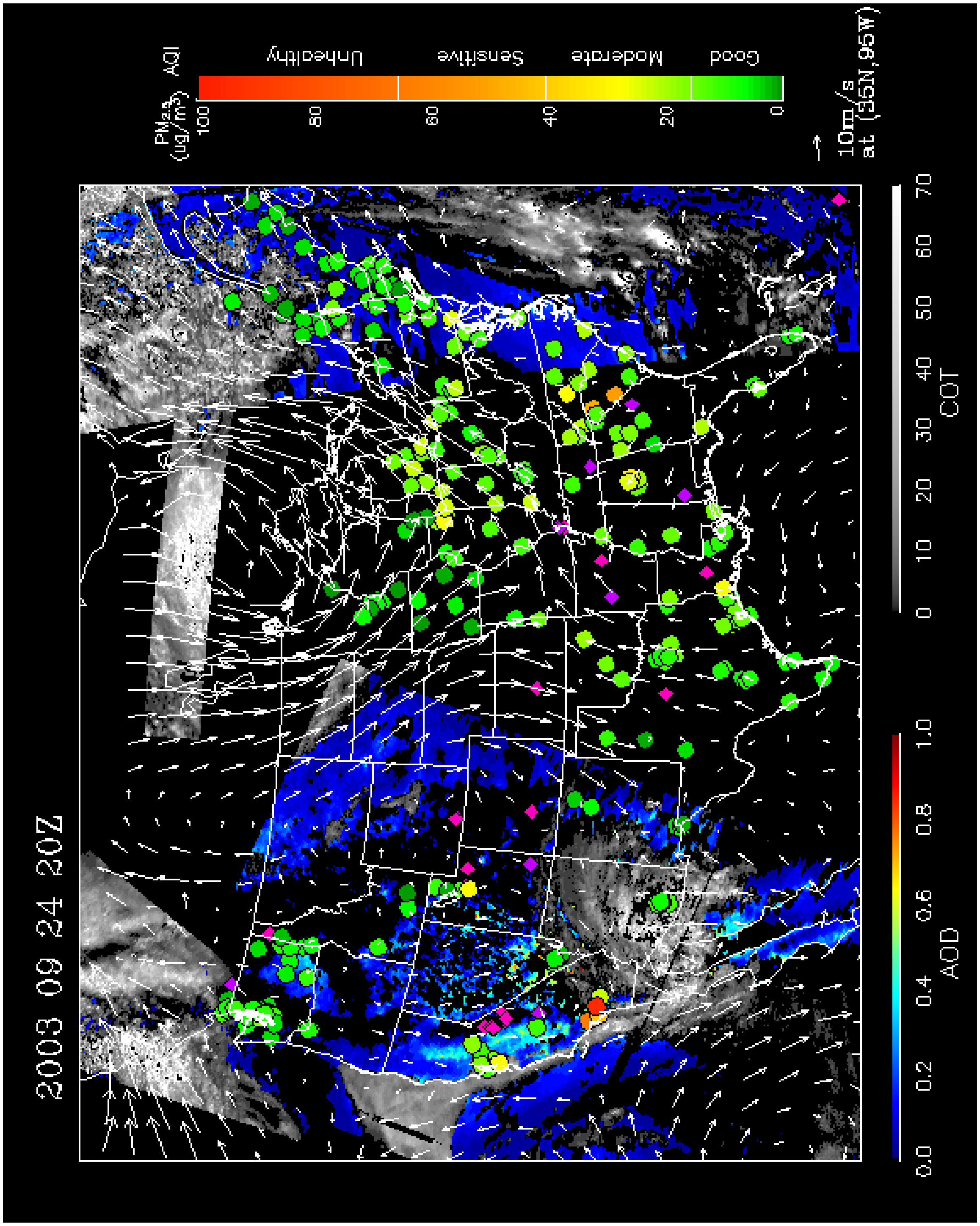
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)



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0.8
1.0
AOD
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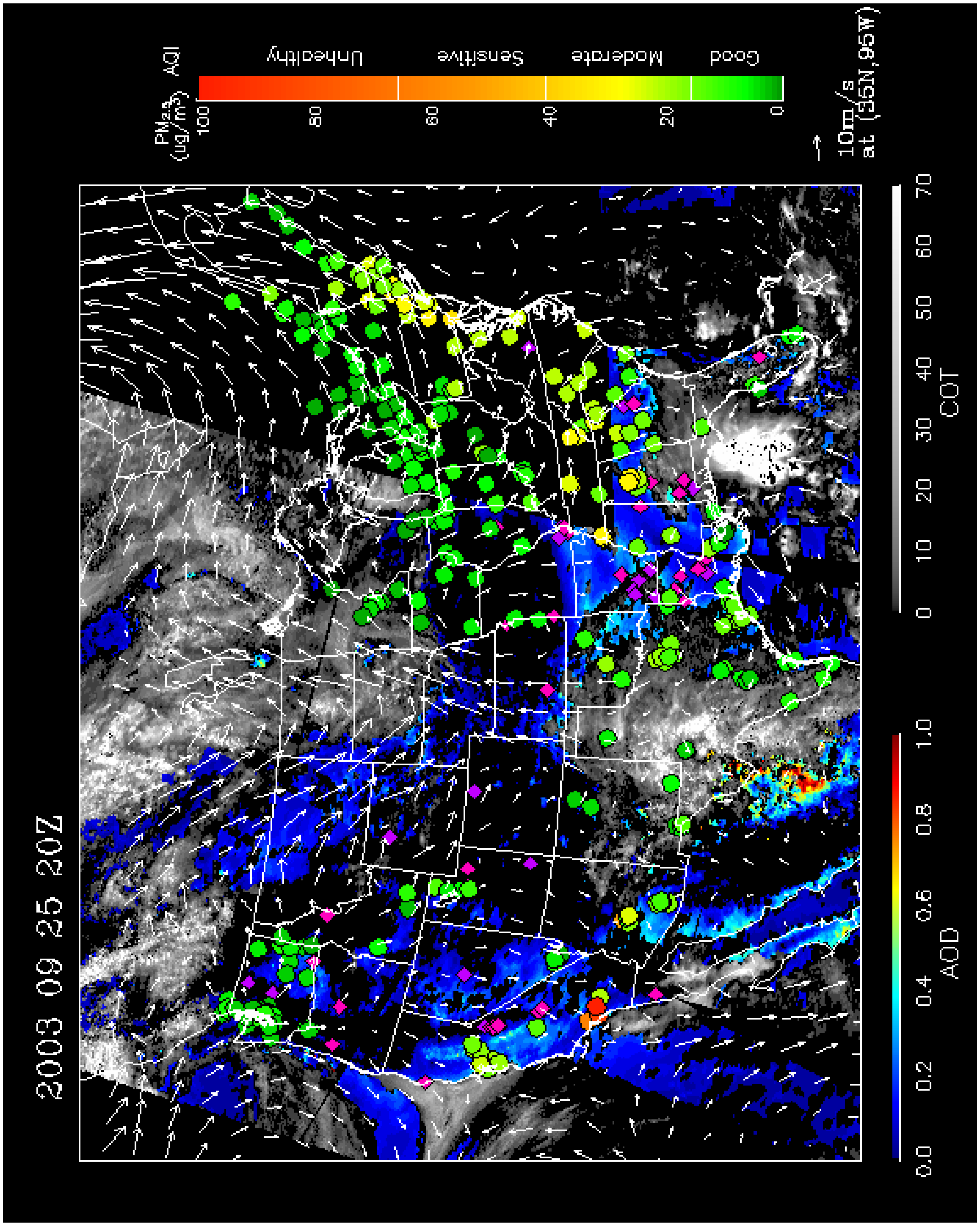
10
20
30
40
50
60
70
COT
PM2.5 (ug/m3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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COT
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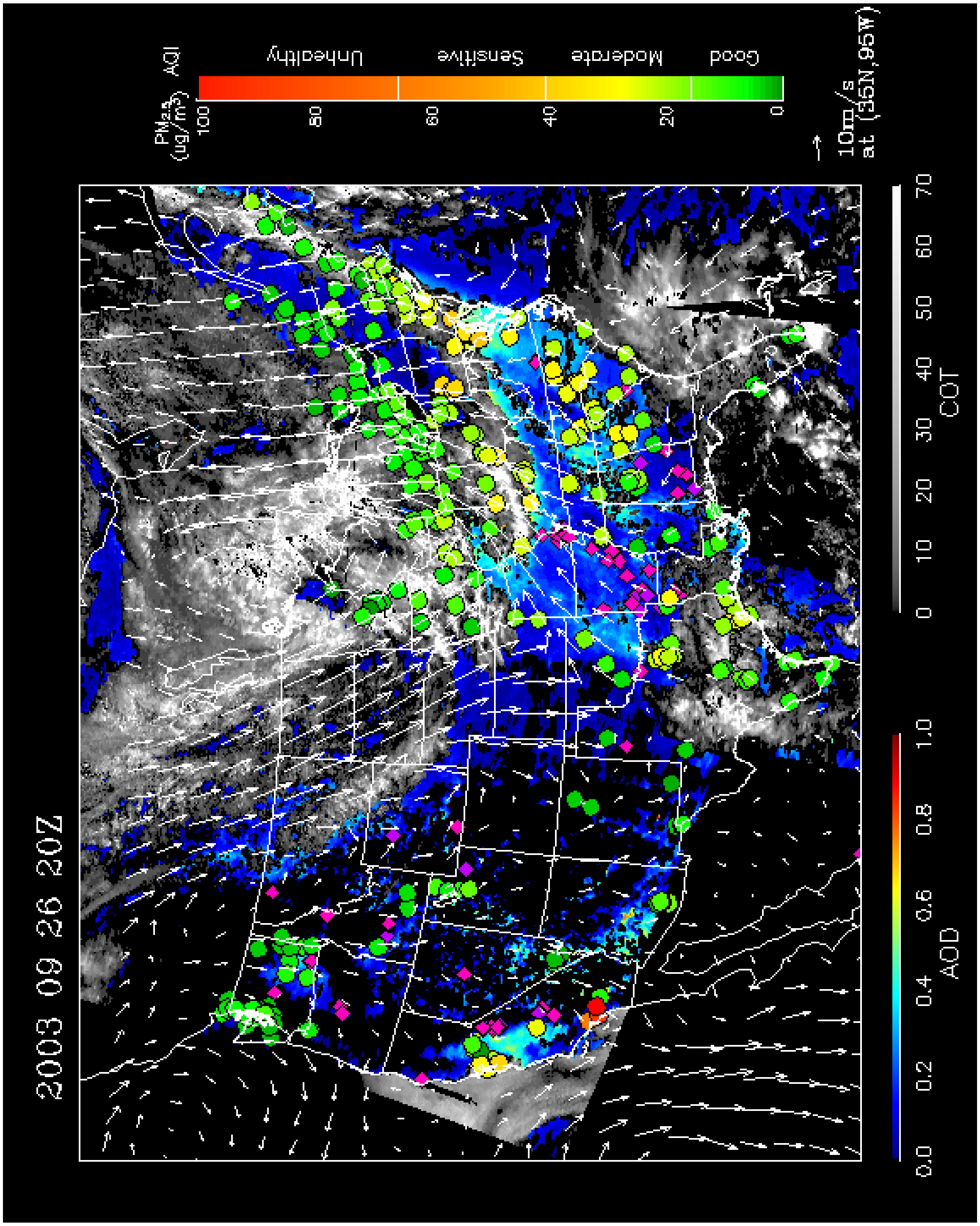
PM2.5 (ug/m3) AQI
100 80 60 40 20 0
Unhealthy
Sensitive
Moderate
Good
10m/s
at (35N,95W)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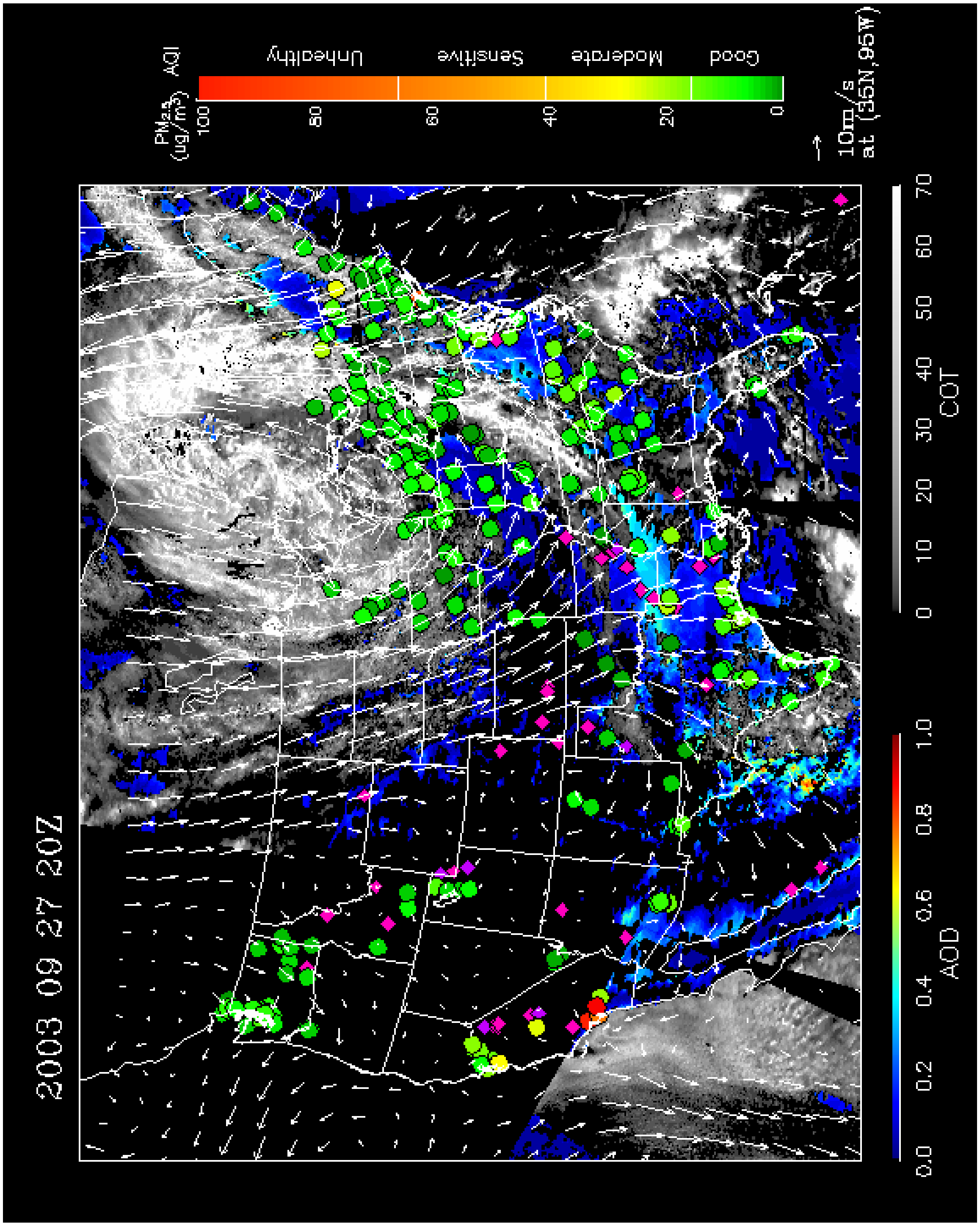
1.0
AOD
0
10
20
30
40
50
60
70
COT
PM2.5 (ug/m3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)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0.0
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0.4
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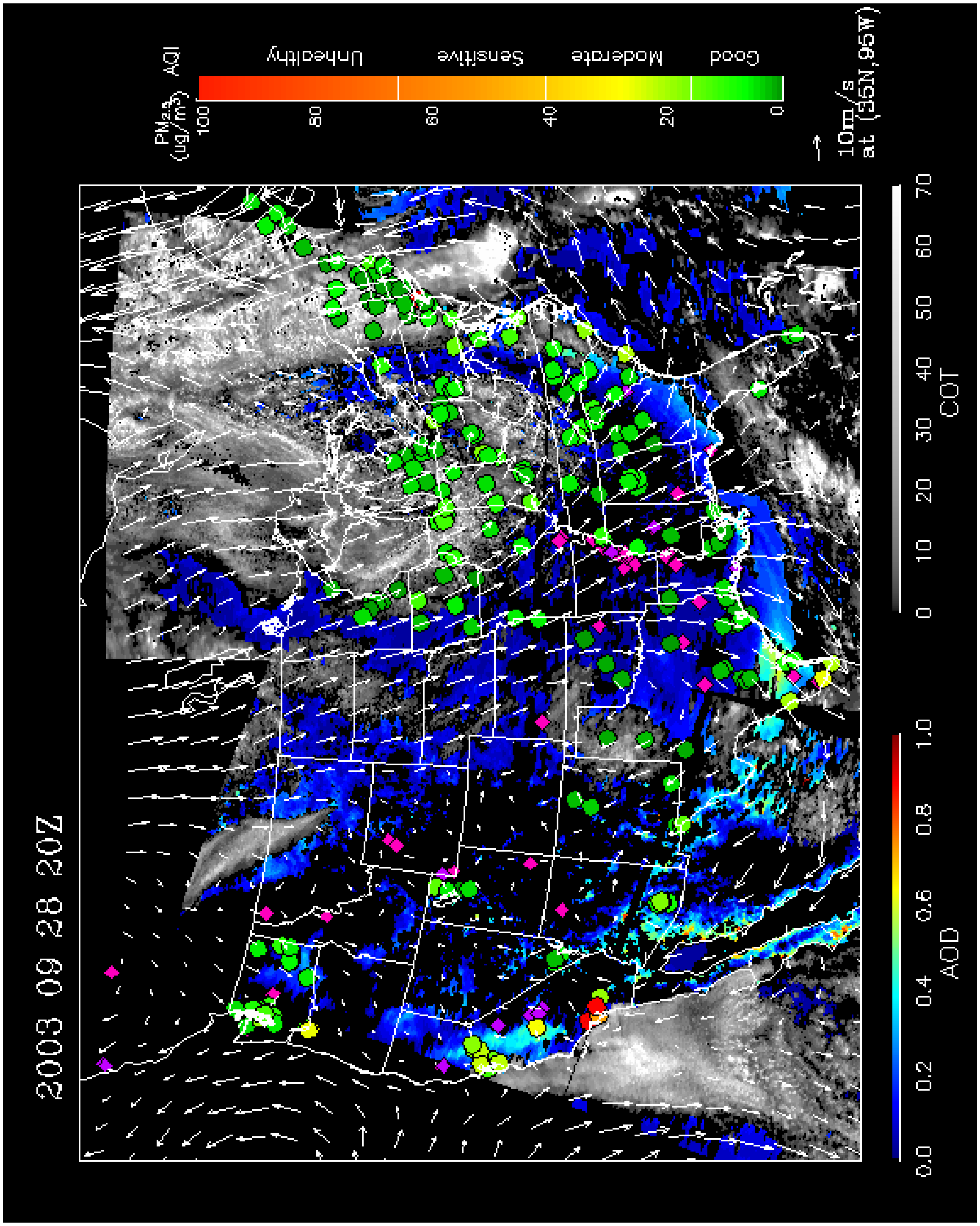
0.8
1.0
AOD
0
10
20
30
40
50
60
70
COT
PM2.5 (ug/m3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)



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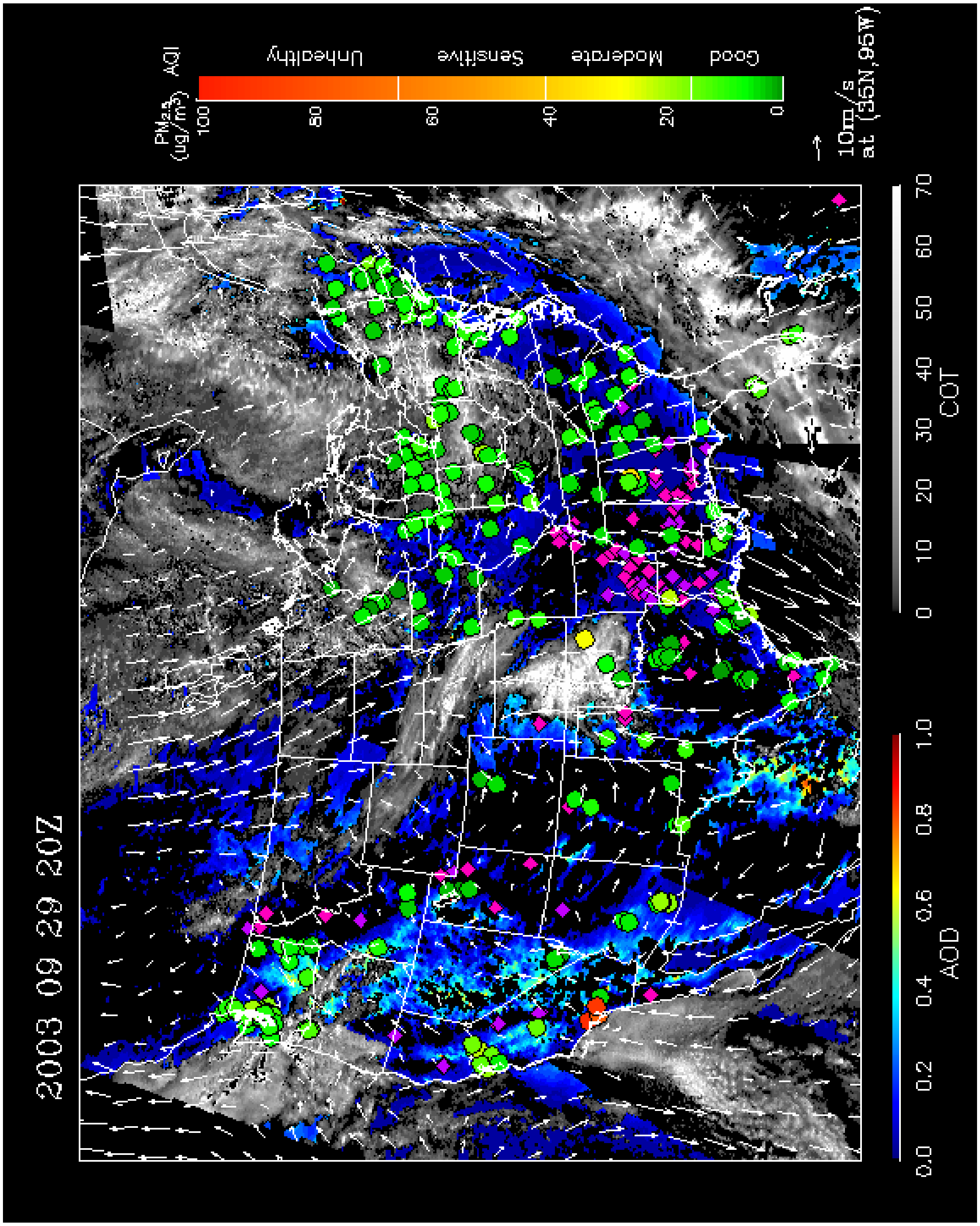
AOD
COT
PM2.5 (ug/m3)
AQI
Good
Moderate
Sensitive
Unhealthy
10m/s
at (35N,95W)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AOD
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COT
PM2.5 (ug/m3)
AQI
100
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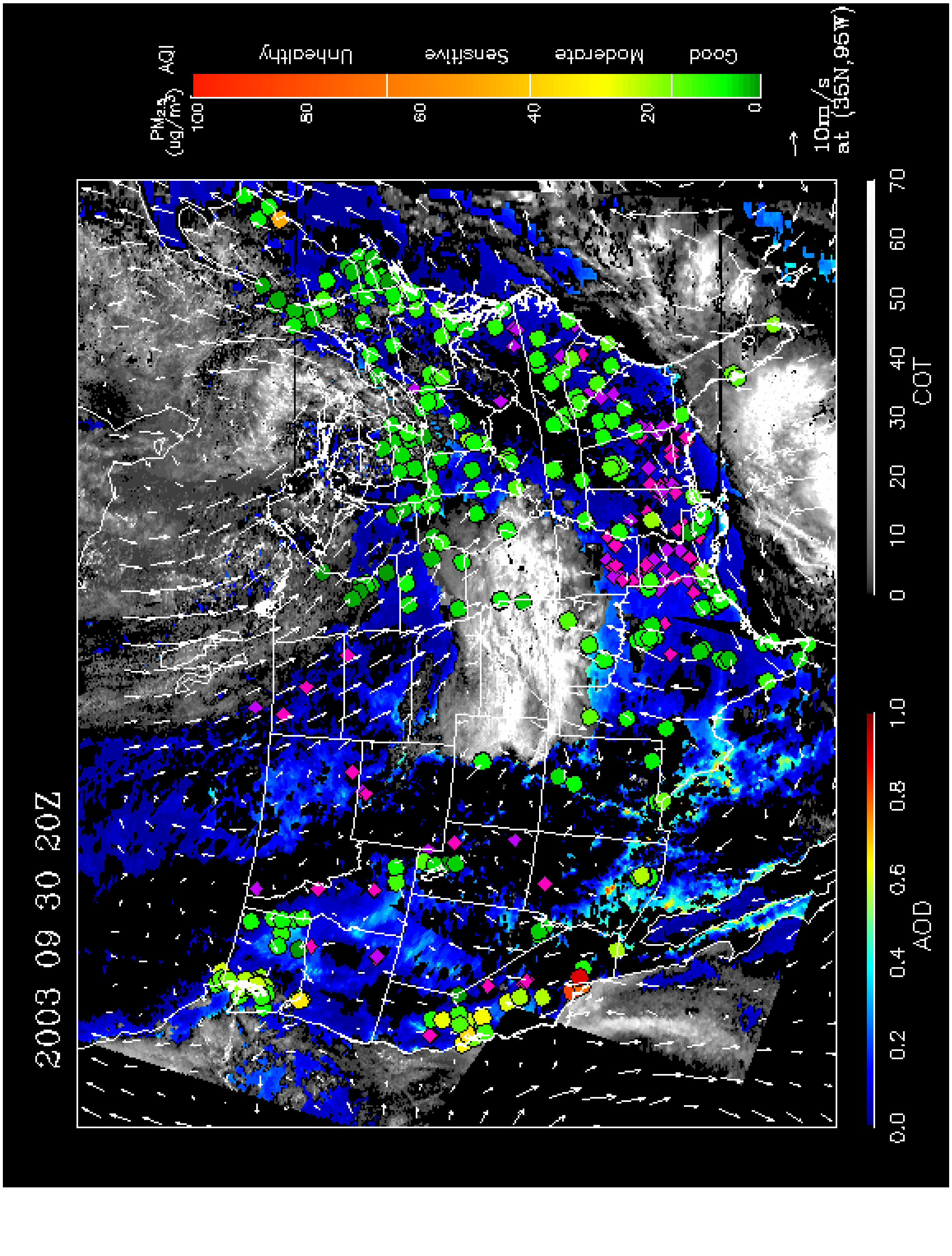
Unhealthy
Sensitive
Moderate
Good
10m/s
at (35N,95W)



2003 09 30 20Z
0.0
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COT
PM2.5 (ug/m3)
AQI
100
80
60
40
20
0
Unhealthy
Sensitive
Moderate
Good
10m/s at (35N,95W)

Appendix B

Site-by-Site Satellite and EPA In-Situ Time Series

Appendix B contains Table B1, Table B2, and the site-by-site satellite and in-situ time series plots for all of the ground stations used in this analysis. Table B1 lists pertinent information (EPA region, station ID, state, longitude, latitude, MSA number, MSA description, station name and monitor method) for the ground station sites in the United States organized by EPA region. In the case where the monitor method is left blank, that information was unavailable to the authors at the time of this printing. For the sites in Canada, only the station ID, province, longitude, latitude, and station name were available. The time series plots are listed in the same order as the Tables B1 and B2.

Table B1. United States EPA Ground Station Sites

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
1	090031018	CT	-72.67	41.76	3280	HARTFORD, CT	Hartford	BAM
1	090091123	CT	-72.92	41.31	1160	BRIDGEPORT, CT	New Haven	BAM
1	090092123	CT	-73.04	41.55	1160	BRIDGEPORT, CT	Waterbury	BAM
1	230010011	ME	-70.21	44.09	4240	LEWISTON-AUBURN, ME	Lewiston County Kitchen	TEOM Gravimetric 50 deg
1	230050027	ME	-70.27	43.66	0	NOT IN AN MSA	Portland Empact	TEOM Gravimetric 50 deg
1	230190002	ME	-68.77	44.80	730	BANGOR, ME	KPSTEOM	TEOM Gravimetric 50 deg
1	250130016	MA	-72.59	42.11	8000	SPRINGFIELD, MA	Springfield	BAM
1	250250042	MA	-71.08	42.33	1120	BOSTON, MA-NH	Boston-Roxbury	BAM
1	250250043	MA	-71.05	42.36	1120	BOSTON, MA-NH	Boston-North End	BAM
1	250270020	MA	-71.80	42.27	0	NOT IN AN MSA	Worcester	BAM
1	330090008	NH	-72.01	44.08	0	NOT IN AN MSA	Haverhill	TEOM Gravimetric 30 deg
1	330110020	NH	-71.46	43.00	5350	NASHUA, NH	Manchester	TEOM Gravimetric 30 deg
1	330115001	NH	-71.88	42.86	5350	NASHUA, NH	MILLER	TEOM Gravimetric 30 deg
1	440070022	RI	-71.42	41.81	6480	PROVIDENCE-FALL RIVER-WARWICK, RI-MA	Providence	
1	440071010	RI	-71.36	41.84	6480	PROVIDENCE-FALL RIVER-WARWICK, RI-MA	E Providence	
1	500030004	VT	-73.25	42.90	0	NOT IN AN MSA	BENINGTN	FDMS-Grav
1	500070012	VT	-73.22	44.48	1305	BURLINGTON, VT	BRLNGTN2	FDMS-Grav
1	500210002	VT	-72.98	43.61	0	NOT IN AN MSA	RUTLAND	FDMS-Grav
2	340030004	NJ	-73.97	40.85	875	BERGEN-PASSAIC, NJ	Fort Lee	TEOM Gravimetric 50 deg
2	340070003	NJ	-75.10	39.92	6160	PHILADELPHIA, PA-NJ	Camden	TEOM Gravimetric 50 deg
2	340230006	NJ	-74.42	40.47	5015	MIDDLESEX-SOMERSET-HUNTERDON, NJ	New Brunswick	TEOM Gravimetric 50 deg
2	340390004	NJ	-74.21	40.64	5640	NEWARK, NJ	Elizabeth Trailer	TEOM Gravimetric 50 deg
2	360010005	NY	-73.75	42.64	160	ALBANY-SCHENECTADY-TROY, NY	ALBNY	TEOM Gravimetric 50 deg
2	360050113	NY	-74.79	41.48	5600	NEW YORK, NY	PS154	TEOM Gravimetric 50 deg
2	360290005	NY	-78.81	42.88	1280	BUFFALO-NIAGARA FALLS, NY	Buffalo	TEOM Gravimetric 50 deg
2	360310003	NY	-73.90	44.36	0	NOT IN AN MSA	Whiteface	TEOM Gravimetric 50 deg
2	360470118	NY	-73.93	40.69	5600	NEW YORK, NY	Brooklyn	TEOM Gravimetric 50 deg
2	360556001	NY	-77.57	43.16	6840	ROCHESTER, NY	Rochester	TEOM Gravimetric 50 deg

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
2	360590005	NY	-73.59	40.74	5380	NASSAU-SUFFOLK, NY	Eisenhower Park	TEOM Gravimetric 50 deg
2	360610115	NY	-73.93	40.85	5600	NEW YORK, NY	NYC	TEOM Gravimetric 50 deg
2	360632008	NY	-79.00	43.08	1280	BUFFALO-NIAGARA FALLS, NY	Niagara Falls	TEOM Gravimetric 50 deg
2	360652001	NY	-75.22	43.10	8680	UTICA-ROME, NY	UTICA	TEOM Gravimetric 50 deg
2	360710002	NY	-74.01	41.50	5660	NEWBURGH, NY-PA	NBURG	TEOM Gravimetric 50 deg
2	360810124	NY	-73.82	40.74	5600	NEW YORK, NY	Queens	TEOM Gravimetric 50 deg
2	360850114	NY	-74.16	40.63	5600	NEW YORK, NY	Staten	TEOM Gravimetric 50 deg
2	361192004	NY	-73.76	41.05	5600	NEW YORK, NY	White Plains	TEOM Gravimetric 50 deg
3	100032004	DE	-75.56	39.74	9160	WILMINGTON-NEWARK, DE, MD	MLK	BAM
3	110010043	DC	-77.01	38.92	8840	WASHINGTON, DC-MD-VA-WV	MCMILLIAN RESERVOIR	TEOM Gravimetric 50 deg
3	245100040	MD	-76.60	39.30	720	BALTIMORE, MD	Oldtown	TEOM Gravimetric 50 deg
3	420010001	PA	-77.31	39.92	0	NOT IN AN MSA	AREN	TEOM Gravimetric 30 deg
3	420050001	PA	-79.57	40.81	0	NOT IN AN MSA	KITT	TEOM Gravimetric 30 deg
3	420958000	PA	-75.24	40.69	240	ALLENTOWN-BETHLEHEM-EASTON, PA	EAS2	TEOM Gravimetric 30 deg
3	510591005	VA	-77.16	38.84	8840	WASHINGTON, DC-MD-VA-WV	Annandale	TEOM Gravimetric 50 deg
3	510870014	VA	-77.40	37.56	6760	RICHMOND-PETERSBURG, VA	MATH & SCIENCE CTR	TEOM Gravimetric 50 deg
3	516500004	VA	-76.40	37.00	5720	NORFOLK-VIRGINIA BEACH-NEWPORT NEWS,VA-NC	VA SCHOOL	TEOM Gravimetric 50 deg
4	010730023	AL	-86.82	33.55	1000	BIRMINGHAM, AL	NO. BHAM	TEOM Gravimetric 50 deg
4	010731005	AL	-87.01	33.33	1000	BIRMINGHAM, AL	MCADORY	TEOM Gravimetric 50 deg
4	010731006	AL	-87.31	33.46	1000	BIRMINGHAM, AL	PROVIDENCE	
4	010732003	AL	-86.92	33.50	1000	BIRMINGHAM, AL	WYLAM	TEOM Gravimetric 50 deg
4	010732006	AL	-86.80	33.39	1000	BIRMINGHAM, AL	HOOVER	TEOM Gravimetric 50 deg
4	010735002	AL	-86.67	33.70	1000	BIRMINGHAM, AL	PINSON	TEOM Gravimetric 50 deg
4	010735003	AL	-86.56	33.48	1000	BIRMINGHAM, AL	CORNER	TEOM Gravimetric 50 deg
4	120730012	FL	-84.35	30.44	8240	TALLAHASSEE, FL	Tallahassee Community College	TEOM Gravimetric 50 deg
4	130210012	GA	-83.54	32.80	4680	MACON, GA	Macon	TEOM Gravimetric 30 deg
4	130890002	GA	-84.27	33.69	520	ATLANTA, GA	South Dekalb	TEOM Gravimetric 30 deg
4	131350002	GA	-84.07	33.96	520	ATLANTA, GA	Gwinnett Tech	TEOM Gravimetric 30 deg
4	131510002	GA	-84.16	33.43	520	ATLANTA, GA	McDonough	TEOM Gravimetric 30 deg
4	132150008	GA	-84.94	32.52	1800	COLUMBUS, GA-AL	Columbus Airport	TEOM Gravimetric 30 deg

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
4	132230003	GA	-85.05	33.93	520	ATLANTA, GA	Yorkville	TEOM Gravimetric 30 deg
4	211110027	KY	-85.58	38.14	4520	LOUISVILLE, KY-IN	BATES	
4	211110043	KY	-85.49	38.13	4520	LOUISVILLE, KY-IN	Southwick Community Center	
4	211110048	KY	-85.73	38.24	4520	LOUISVILLE, KY-IN	Barret (APDC)	
4	211110051	KY	-85.90	38.06	4520	LOUISVILLE, KY-IN	WATSON	
4	280110001	MS	-90.73	33.76	0	NOT IN AN MSA	CLEVELAND	TEOM Gravimetric 50 deg
4	280470008	MS	-89.05	30.39	920	BILOXI-GULFPORT-PASCAGOULA, MS	GPORT YC	TEOM Gravimetric 50 deg
4	280490018	MS	-90.19	32.30	3560	JACKSON, MS	JAXCOURT	TEOM Gravimetric 50 deg
4	370350004	NC	-81.37	35.73	3290	HICKORY-MORGANTON-LENOIR, NC	HICKORY	TEOM Gravimetric 50 deg
4	370670022	NC	-80.23	36.11	3120	GREENSBORO--WINSTON-SALEM--HIGH POINT, NC	HATTIEAVEN	TEOM Gravimetric 50 deg
4	370810013	NC	-79.80	36.11	3120	GREENSBORO--WINSTON-SALEM--HIGH POINT, NC	MENDNHAL	TEOM Gravimetric 50 deg
4	371190041	NC	-80.78	35.24	1520	CHARLOTTE-GASTONIA-ROCK HILL, NC-SC	GARINGER	TEOM Gravimetric 50 deg
4	371190042	NC	-80.87	35.15	1520	CHARLOTTE-GASTONIA-ROCK HILL, NC-SC	Montclaire	TEOM Gravimetric 50 deg
4	371290002	NC	-77.86	34.36	9200	WILMINGTON, NC	CASTLE H	TEOM Gravimetric 50 deg
4	371730002	NC	-83.44	35.44	0	NOT IN AN MSA	BRYSON	TEOM Gravimetric 50 deg
4	371830014	NC	-78.58	35.86	6640	RALEIGH-DURHAM-CHAPEL HILL, NC	MILBROOK	TEOM Gravimetric 50 deg
4	450070003	SC	-82.49	34.78	3160	GREENVILLE-SPARTANBURG-ANDERSON, SC	POWDERVILLE	BAM
4	450190046	SC	-79.66	32.94	1440	CHARLESTON-NORTH CHARLESTON, SC	CAPE ROMAIN	TEOM Gravimetric 50 deg
4	450250001	SC	-80.20	34.62	0	NOT IN AN MSA	Chesterfield	TEOM Gravimetric 50 deg
4	450290002	SC	-80.96	33.01	0	NOT IN AN MSA	ASHTON	TEOM Gravimetric 50 deg
4	450370001	SC	-81.85	33.74	600	AUGUSTA-AIKEN, GA-SC	TRENTON	TEOM Gravimetric 50 deg
4	450730001	SC	-83.24	34.81	0	NOT IN AN MSA	LONG CREEK	TEOM Gravimetric 50 deg
4	450770002	SC	-82.84	34.65	3160	GREENVILLE-SPARTANBURG-ANDERSON, SC	CLEMSON	TEOM Gravimetric 50 deg

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
4	470090101	TN	-83.94	35.63	3840	KNOXVILLE, TN	Look Rock-GSMNP	TEOM Gravimetric 30 deg
4	470370023	TN	-86.74	36.18	5360	NASHVILLE, TN	LOCKLAND	TEOM Gravimetric 50 deg
4	470931013	TN	-83.93	35.98	3840	KNOXVILLE, TN	AIR LAB	TEOM Gravimetric 50 deg
4	471570024	TN	-90.04	35.15	4920	MEMPHIS, TN-AR-MS	Alabama Ave	TEOM Gravimetric 50 deg
4	471570038	TN	-89.94	35.18	4920	MEMPHIS, TN-AR-MS	Jackson	TEOM Gravimetric 50 deg
4	471650007	TN	-86.65	36.30	5360	NASHVILLE, TN	HVILLE	
5	170310001	IL	-87.73	41.67	1600	CHICAGO, IL	ALSIP	BAM
5	170310022	IL	-87.54	41.69	1600	CHICAGO, IL	CHI_WASH	BAM
5	170310057	IL	-87.72	41.91	1600	CHICAGO, IL	CHI_SP	BAM
5	170310076	IL	-87.71	41.75	1600	CHICAGO, IL	CHI_COM	
5	170314007	IL	-87.86	42.06	1600	CHICAGO, IL	DESPLNS	BAM
5	170314101	IL	-88.11	42.05	1600	CHICAGO, IL	HOFFMAN	BAM
5	170316006	IL	-87.83	41.88	1600	CHICAGO, IL	MAYWOOD2	BAM
5	170434002	IL	-88.15	41.77	1600	CHICAGO, IL	NAPERVL	BAM
5	171150013	IL	-88.93	39.87	2040	DECATUR, IL	DECATUR	BAM
5	171630010	IL	-90.16	38.61	7040	ST. LOUIS, MO-IL	ESTLOUIS	BAM
5	180030004	IN	-85.10	41.09	2760	FORT WAYNE, IN	FTWAYNE	TEOM Gravimetric 50 deg
5	180890022	IN	-87.30	41.61	2960	GARY, IN	GARYIITR	TEOM Gravimetric 50 deg
5	180970078	IN	-86.11	39.81	3480	INDIANAPOLIS, IN	Washington Park	TEOM Gravimetric 50 deg
5	181411008	IN	-86.24	41.69	7800	SOUTH BEND, IN	SBEND	TEOM Gravimetric 50 deg
5	181630012	IN	-87.57	38.02	2440	EVANSVILLE-HENDERSON, IN-KY	EVANSVIL	FDMS-Grav
5	181670018	IN	-87.40	39.49	8320	TERRE HAUTE, IN	TERHAUTE	FDMS-Grav
5	260490021	MI	-83.67	43.03	2640	FLINT, MI	FLINT	FDMS-Grav
5	260650012	MI	-84.54	42.74	4040	LANSING-EAST LANSING, MI	LANSING	FDMS-Grav
5	260770008	MI	-85.54	42.28	3720	KALAMAZOO-BATTLE CREEK, MI	KALAMAZO	FDMS-Grav
5	260810020	MI	-85.67	42.98	3000	GRAND RAPIDS-MUSKEGON-HOLLAND, MI	GRRAPIDS	FDMS-Grav
5	261450018	MI	-83.97	43.51	6960	SAGINAW-BAY CITY-MIDLAND, MI	Saginaw	FDMS-Grav
5	261610008	MI	-83.60	42.24	440	ANN ARBOR, MI	YPSILANT	FDMS-Grav
5	261630001	MI	-83.21	42.23	2160	DETROIT, MI	Detroit Allen Park	FDMS-Grav

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
5	270031002	MN	-93.21	45.14	5120	MINNEAPOLIS-ST. PAUL, MN-WI	ANOKA CNTY AIRPORT	BAM
5	270370470	MN	-93.24	44.74	5120	MINNEAPOLIS-ST. PAUL, MN-WI	Westview Elementary	BAM
5	270530963	MN	-93.26	44.95	5120	MINNEAPOLIS-ST. PAUL, MN-WI	Philips Andersen	BAM
5	271095008	MN	-92.45	43.99	6820	ROCHESTER, MN	Rochester Franklin	BAM
5	271230871	MN	-93.04	44.96	5120	MINNEAPOLIS-ST. PAUL, MN-WI	Harding High School	BAM
5	271377551	MN	-92.13	46.77	2240	DULUTH-SUPERIOR, MN-WI	DULUTH LINCOLN PARK	BAM
5	271453052	MN	-94.13	45.55	6980	ST. CLOUD, MN	St. Cloud Talahi	BAM
5	271713201	MN	-93.67	45.21	5120	MINNEAPOLIS-ST. PAUL, MN-WI	St. Michael	BAM
5	390350060	OH	-81.68	41.49	1680	CLEVELAND-LORAIN-ELYRIA, OH	G.T.Craig	TEOM Gravimetric 50 deg
5	390490028	OH	-82.96	39.91	1840	COLUMBUS, OH	KOEBEL	TEOM Gravimetric 50 deg
5	390490029	OH	-82.82	40.09	1840	COLUMBUS, OH	NEW_ALBNY	TEOM Gravimetric 50 deg
5	390610040	OH	-84.51	39.13	1640	CINCINNATI, OH-KY-IN	TAFT	TEOM Gravimetric 50 deg
5	390950024	OH	-83.55	41.64	8400	TOLEDO, OH	ERIE	TEOM Gravimetric 50 deg
5	390990014	OH	-80.66	41.10	9320	YOUNGSTOWN-WARREN, OH	Head Start	TEOM Gravimetric 50 deg
5	391130031	OH	-84.14	39.76	2000	DAYTON-SPRINGFIELD, OH	W_Wright	BAM
5	391130032	OH	-84.19	39.72	2000	DAYTON-SPRINGFIELD, OH	Library	BAM
5	391510020	OH	-81.37	40.80	1320	CANTON-MASSILLON, OH	CANTON	TEOM Gravimetric 50 deg
5	391530017	OH	-81.33	41.18	80	AKRON, OH	EAST_HS	TEOM Gravimetric 50 deg
5	550270007	WI	-88.53	43.44	0	NOT IN AN MSA	MAYVILLE	TEOM Gravimetric 50 deg
5	550590019	WI	-87.81	42.50	3800	KENOSHA, WI	CHIWAUKEE	FDMS-Grav
5	550790026	WI	-87.91	43.06	5080	MILWAUKEE-WAUKESHA, WI	SER DNR MILW	
5	551330027	WI	-88.21	43.02	5080	MILWAUKEE-WAUKESHA, WI	CLEVELAND-WAUK	TEOM Gravimetric 50 deg
6	220150008	LA	-93.75	32.54	7680	SHREVEPORT-BOSSIER CITY, LA	Shreveport Airport	TEOM Gravimetric 50 deg
6	220190008	LA	-93.29	30.26	3960	LAKE CHARLES, LA	Westlake	TEOM Gravimetric 50 deg
6	220330013	LA	-91.06	30.70	760	BATON ROUGE, LA	PRIDE	TEOM Gravimetric 50 deg
6	220511001	LA	-90.27	30.04	5560	NEW ORLEANS, LA	Kenner	TEOM Gravimetric 50 deg

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
6	220630002	LA	-90.81	30.32	760	BATON ROUGE, LA	FRENCH	TEOM Gravimetric 50 deg
6	220710012	LA	-90.10	29.99	5560	NEW ORLEANS, LA	City Park	TEOM Gravimetric 50 deg
6	350130016	NM	-106.60	32.00	4100	LAS CRUCES, NM	TONY-14	TEOM Gravimetric 50 deg
6	350130017	NM	-106.56	31.80	4100	LAS CRUCES, NM	SPCY-12	TEOM Gravimetric 50 deg
6	350130021	NM	-106.58	31.80	4100	LAS CRUCES, NM	DESERT-52	TEOM Gravimetric 50 deg
6	350490020	NM	-105.96	35.67	7490	SANTA FE, NM	SFTEOM-1	
6	400270049	OK	-97.49	35.32	5880	OKLAHOMA CITY, OK	Moore	TEOM Gravimetric 50 deg
6	400310647	OK	-98.37	34.65	4200	LAWTON, OK	Lawton	TEOM Gravimetric 50 deg
6	401431127	OK	-95.98	36.21	8560	TULSA, OK	Tulsa	TEOM Gravimetric 50 deg
6	480290053	TX	-98.31	29.59	7240	SAN ANTONIO, TX	Selma C301	TEOM Gravimetric 50 deg
6	480290055	TX	-98.43	29.41	7240	SAN ANTONIO, TX	CPS Pecan Valley C678	TEOM Gravimetric 50 deg
6	480290059	TX	-98.31	29.28	7240	SAN ANTONIO, TX	Calaveras Lake C59	TEOM Gravimetric 50 deg
6	481130069	TX	-96.86	32.82	1920	DALLAS, TX	Dallas Hinton St. C401/C161 [E]	TEOM Gravimetric 50 deg
6	481133003	TX	-96.55	32.77	1920	DALLAS, TX	Sunnyvale Long Creek C74	TEOM Gravimetric 50 deg
6	481210034	TX	-97.19	33.19	1920	DALLAS, TX	Denton Airport South C56/C157/C163	TEOM Gravimetric 50 deg
6	481350003	TX	-102.34	31.84	5800	ODESSA-MIDLAND, TX	Odessa Hays C47/C122 [N]	TEOM Gravimetric 50 deg
6	481351014	TX	-102.34	31.87	5800	ODESSA-MIDLAND, TX	Odessa Gonzales C1014	TEOM Gravimetric 50 deg
6	481390015	TX	-97.02	32.44	1920	DALLAS, TX	Midlothian Tower C94/C158/C160	TEOM Gravimetric 50 deg
6	481390017	TX	-97.04	32.47	1920	DALLAS, TX	Midlothian Wyatt Road C302	TEOM Gravimetric 50 deg
6	481410037	TX	-106.50	31.77	2320	EL PASO, TX	El Paso UTEP C12/C125/C151	TEOM Gravimetric 50 deg
6	481410053	TX	-106.50	31.76	2320	EL PASO, TX	El Paso Sun Metro C40/C116	TEOM Gravimetric 50 deg
6	481670014	TX	-94.86	29.26	2920	GALVESTON-TEXAS CITY, TX	Galveston Airport C34/C109/C152	TEOM Gravimetric 50 deg
6	482010024	TX	-95.33	29.90	3360	HOUSTON, TX	Houston Aldine C8/C108/C150 [Q]	TEOM Gravimetric 50 deg
6	482010026	TX	-95.13	29.80	3360	HOUSTON, TX	Channelview C15/C115	TEOM Gravimetric 50 deg
6	482011034	TX	-95.22	29.77	3360	HOUSTON, TX	Houston East C1	TEOM Gravimetric 50 deg
6	482011035	TX	-95.26	29.73	3360	HOUSTON, TX	Clinton C403/C113/C304	TEOM Gravimetric 50 deg
6	482011039	TX	-95.13	29.67	3360	HOUSTON, TX	Houston Deer Park 2 C35/C139 [H]	TEOM Gravimetric 50 deg
6	482011042	TX	-95.19	30.06	3360	HOUSTON, TX	Kingwood C309	TEOM Gravimetric 50 deg

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
6	482011050	TX	-95.02	29.58	3360	HOUSTON, TX	Seabrook Friendship Park C45	TEOM Gravimetric 50 deg
6	482030002	TX	-94.17	32.67	4420	LONGVIEW-MARSHALL, TX	Karnack C85	TEOM Gravimetric 50 deg
6	482450020	TX	-94.08	30.07	840	BEAUMONT-PORT ARTHUR, TX	Carroll St. Park C54/C130	TEOM Gravimetric 50 deg
6	482450021	TX	-93.91	29.92	840	BEAUMONT-PORT ARTHUR, TX	Thomas Jefferson School C303	TEOM Gravimetric 50 deg
6	482450022	TX	-94.31	29.86	840	BEAUMONT-PORT ARTHUR, TX	Hamshire C64	TEOM Gravimetric 50 deg
6	482570005	TX	-96.32	32.56	1920	DALLAS, TX	Kaufman C71	TEOM Gravimetric 50 deg
6	482730314	TX	-97.30	27.43	0	NOT IN AN MSA	Corpus Christi-National Seashore CAMS314	TEOM Gravimetric 50 deg
6	483030001	TX	-101.85	33.59	4600	LUBBOCK, TX	Lubbock C306	TEOM Gravimetric 50 deg
6	483390078	TX	-95.42	30.35	3360	HOUSTON, TX	Conroe Relocated C78	TEOM Gravimetric 50 deg
6	483611100	TX	-93.87	30.18	840	BEAUMONT-PORT ARTHUR, TX	SETRPC Mauriceville 42 C642	TEOM Gravimetric 50 deg
6	483750005	TX	-101.83	35.21	320	AMARILLO, TX	Amarillo C305	TEOM Gravimetric 50 deg
6	484391006	TX	-97.34	32.76	2800	FORT WORTH-ARLINGTON, TX	Haws Athletic Center C310	TEOM Gravimetric 50 deg
6	484393008	TX	-97.34	32.81	2800	FORT WORTH-ARLINGTON, TX	Diamond Hill Fort Worth C308	TEOM Gravimetric 50 deg
6	484393009	TX	-97.06	32.98	2800	FORT WORTH-ARLINGTON, TX	Grapevine Fairwau C70	TEOM Gravimetric 50 deg
6	484393011	TX	-97.09	32.66	2800	FORT WORTH-ARLINGTON, TX	Arlington Municipal Airport C61	TEOM Gravimetric 50 deg
6	484530014	TX	-97.76	30.35	640	AUSTIN-SAN MARCOS, TX	Austin Northwest C3	TEOM Gravimetric 50 deg
6	484530020	TX	-97.87	30.48	640	AUSTIN-SAN MARCOS, TX	Audubon C38	TEOM Gravimetric 50 deg
7	190330018	IA	-93.20	43.17	0	NOT IN AN MSA	M. City	FDMS-Grav
7	190450019	IA	-90.21	41.82	0	NOT IN AN MSA	Clinton2	FDMS-Grav
7	191130037	IA	-91.68	42.01	1360	CEDAR RAPIDS, IA	Army Reserve Center	FDMS-Grav
7	191370002	IA	-95.04	40.97	0	NOT IN AN MSA	VIKINGLK	FDMS-Grav
7	191471002	IA	-94.69	43.12	0	NOT IN AN MSA	Emmetsburg	FDMS-Grav
7	191530030	IA	-93.64	41.60	2120	DES MOINES, IA	CARPNTER	
7	191630015	IA	-90.59	41.53	1960	DAVENPORT-MOLINE-ROCK ISLAND, IA-IL	Dav10Vin	FDMS-Grav
7	191630019	IA	-90.62	41.52	1960	DAVENPORT-MOLINE-ROCK ISLAND, IA-IL	Davblhwk	FDMS-Grav
7	191770005	IA	-91.99	40.69	0	NOT IN AN MSA	Lake SUGEMA	FDMS-Grav
7	202090021	KS	-94.64	39.12	3760	KANSAS CITY, MO-KS	WY/KC	FDMS-Grav
7	295100085	MO	-90.20	38.66	7040	ST. LOUIS, MO-IL	BLAIR STREET	TEOM Gravimetric 30 deg
8	080010006	CO	-104.94	39.83	2080	DENVER, CO	Commerce City	TEOM Gravimetric 30 deg
8	080310002	CO	-104.99	39.75	2080	DENVER, CO	CAMP	TEOM Gravimetric 30 deg

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
8	080310013	CO	-104.94	39.74	2080	DENVER, CO	NJH	TEOM Gravimetric 30 deg
8	081230006	CO	-104.71	40.41	3060	GREELEY, CO	Greeley	TEOM Gravimetric 30 deg
8	490050002	UT	-111.84	41.73	0	NOT IN AN MSA	Logan #4	
8	490353006	UT	-111.87	40.73	7160	SALT LAKE CITY-OGDEN, UT	Hawthorne	
8	490494001	UT	-111.71	40.34	6520	PROVO-OREM, UT	Linden-Provo	
8	490570002	UT	-111.97	41.21	7160	SALT LAKE CITY-OGDEN, UT	Ogden #2	
9	040191030	AZ	-111.00	31.88	8520	TUSCON, AZ	Green Valley	BAM
9	040191032	AZ	-110.98	32.17	8520	TUSCON, AZ	Rose Elementary	BAM
9	040191034	AZ	-111.13	32.38	8520	TUSCON, AZ	Coachline	BAM
9	040191113	AZ	-110.97	32.25	8520	TUSCON, AZ	Geronimo	BAM
9	060010007	CA	-121.78	37.69	5775	OAKLAND, CA	Livermore-Rincon	
9	060010008	CA	-122.28	37.82	5775	OAKLAND, CA	Oakland-Filbert	
9	060070002	CA	-121.84	39.76	1620	CHICO-PARADISE, CA	Chico-Manzanita	BAM
9	060074001	CA	-121.76	39.31	1620	CHICO-PARADISE, CA	Gridley	BAM
9	060190008	CA	-119.77	36.78	2840	FRESNO, CA	Fresno-1st Street	BAM
9	060250005	CA	-115.48	32.68	0	NOT IN AN MSA	Calexico-Ethel Street	BAM
9	060290014	CA	-119.04	35.36	680	BAKERSFIELD, CA	Bakersfield-5558 California Ave	BAM
9	060310004	CA	-119.33	36.25	0	NOT IN AN MSA	Corcoran	
9	060371002	CA	-118.32	34.18	4480	LOS ANGELES-LONG BEACH, CA	Burbank-W. Palm Ave	
9	060590001	CA	-117.91	33.82	5945	ORANGE COUNTY, CA	Anaheim	
9	060650012	CA	-116.87	33.93	6780	RIVERSIDE-SAN BERNARDINO, CA	Banning-South Hathaway Street	
9	060658001	CA	-117.43	34.01	6780	RIVERSIDE-SAN BERNARDINO, CA	Riverside-Rubidoux	
9	060670006	CA	-121.37	38.61	6920	SACRAMENTO, CA	Sacramento-Del Paso Manor	BAM
9	060670011	CA	-121.42	38.30	6920	SACRAMENTO, CA	Elk Grove-Bruceville Road	BAM
9	060670012	CA	-121.16	38.68	6920	SACRAMENTO, CA	Folsom-Natoma Street	BAM
9	060750005	CA	-122.40	37.77	7360	SAN FRANCISCO, CA	San Francisco-Arkansas Street	
9	060773003	CA	-121.53	37.74	8120	STOCKTON-LODI, CA	Tracy-24371 Patterson Pass Road	
9	060850005	CA	-121.89	37.35	7400	SAN JOSE, CA	San Jose-Jackson St.	
9	060950004	CA	-122.24	38.10	8720	VALLEJO-FAIRFIELD-NAPA,CA	Vallejo-304Tuolumne Street	
9	060990005	CA	-120.99	37.66	5170	MODESTO, CA	Modesto-14th Street	BAM

Table B1. Continued

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
9	061072002	CA	-119.29	36.33	8780	VISALIA-TULARE, PORTERVILLE, CA	Visalia-N. Church Street	
9	320030020	NV	-115.09	36.25	4120	LAS VEGAS, NV-AZ	Craig Road	
9	320030073	NV	-115.33	36.17	4120	LAS VEGAS, NV-AZ	Palo Verde	
9	320030298	NV	-115.06	36.05	4120	LAS VEGAS, NV-AZ	GreenValley	
9	320030539	NV	-115.09	36.14	4120	LAS VEGAS, NV-AZ	East Sahara	
9	320030601	NV	-114.84	35.98	4120	LAS VEGAS, NV-AZ	Boulder City	
9	320032002	NV	-115.12	36.19	4120	LAS VEGAS, NV-AZ	J. D. Smith	
10	160010011	ID	-116.27	43.64	1080	BOISE CITY, ID	Boise Mountain View School	TEOM Gravimetric 50 deg
10	160050015	ID	-112.46	42.88	6340	POCATELLO, ID	Pocatello G&G	TEOM Gravimetric 50 deg
10	160550006	ID	-116.76	47.68	0	NOT IN AN MSA	Coeur D'Alene-Teom	TEOM Gravimetric 50 deg
10	160690012	ID	-116.97	46.40	0	NOT IN AN MSA	Lewiston	TEOM Gravimetric 50 deg
10	160830010	ID	-113.48	42.72	0	NOT IN AN MSA	Twin Falls-Teom	TEOM Gravimetric 50 deg
10	410510080	OR	-122.60	45.50	6440	PORTLAND-VANCOUVER,OR-WA	Portland-SE Lafayette	
10	410510246	OR	-122.67	45.56	6440	PORTLAND-VANCOUVER, OR-WA	Portland-North Roselawn	
10	530010003	WA	-118.38	47.13	0	NOT IN AN MSA	Ritzville	nephelometer
10	530050002	WA	-119.20	46.22	6740	RICHLAND-KENNEWICK-PASCO, WA	Kennewick	TEOM Gravimetric 50 deg
10	530090009	WA	-123.46	48.12	0	NOT IN AN MSA	Port Angeles	nephelometer
10	530110013	WA	-122.59	45.65	6440	PORTLAND-VANCOUVER, OR-WA	Vancouver	
10	530251002	WA	-119.27	47.13	0	NOT IN AN MSA	Moses Lake	
10	530272002	WA	-123.83	46.97	0	NOT IN AN MSA	Aberdeen	nephelometer
10	530310003	WA	-122.78	48.13	0	NOT IN AN MSA	Port Twonsend	nephelometer
10	530330017	WA	-121.77	47.49	7600	SEATTLE-BELLEVUE-EVERETT, WA	North Bend	nephelometer
10	530330024	WA	-122.28	47.75	7600	SEATTLE-BELLEVUE-EVERETT, WA	Lake Forest Park	nephelometer
10	530330036	WA	-122.15	47.62	7600	SEATTLE-BELLEVUE-EVERETT, WA	Bellevue	

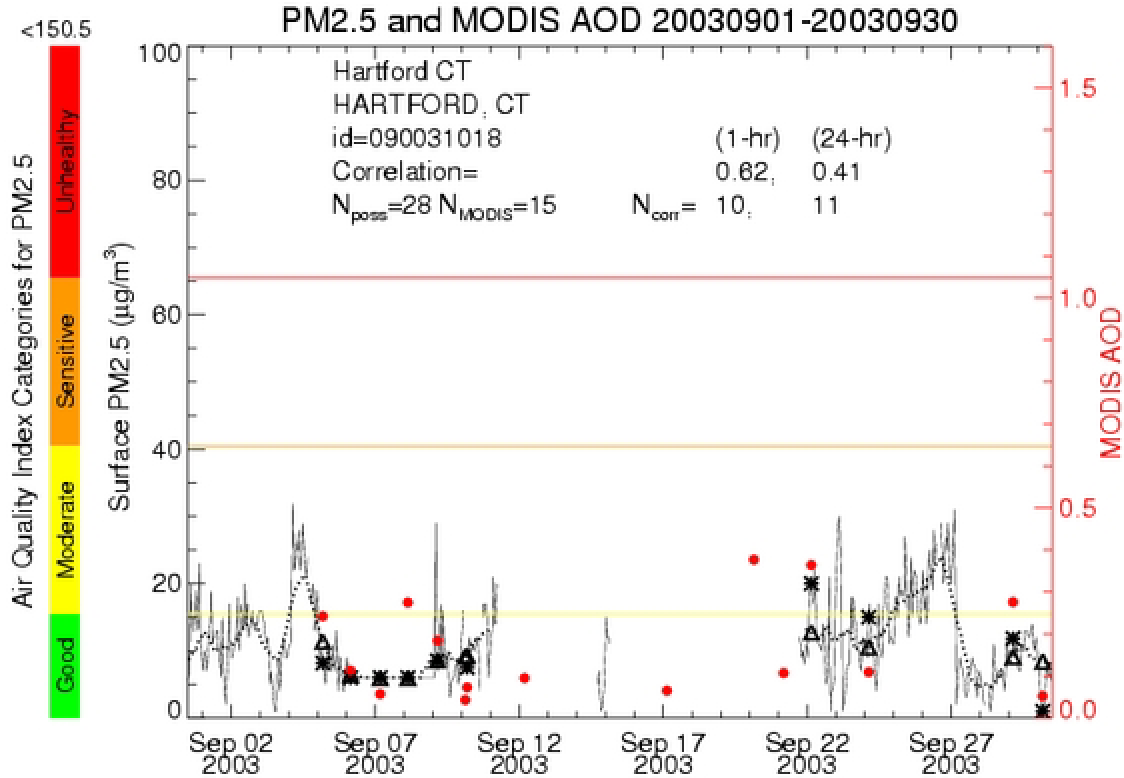
Table B1. Concluded

Region	Station ID	State	Lon	Lat	MSA #	MSA description	Station Name	Monitor Method
10	530330039	WA	-122.36	47.63	7600	SEATTLE-BELLEVUE-EVERETT, WA	Seattle Queen Anne Hill	
10	530330057	WA	-122.34	47.56	7600	SEATTLE-BELLEVUE-EVERETT, WA	Seattle Duwamish	nephelometer
10	530330080	WA	-122.31	47.57	7600	SEATTLE-BELLEVUE-EVERETT, WA	Seattle Beacon Hill	nephelometer
10	530331011	WA	-122.32	47.53	7600	SEATTLE-BELLEVUE-EVERETT, WA	Seattle South Park	nephelometer
10	530332004	WA	-122.23	47.39	7600	SEATTLE-BELLEVUE-EVERETT, WA	Kent	nephelometer
10	530350007	WA	-122.68	47.66	1150	BREMERTON, WA	Silverdale	
10	530351005	WA	-122.64	47.63	1150	BREMERTON, WA	Bremerton	
10	530450004	WA	-123.11	47.19	0	NOT IN AN MSA	Shelton	nephelometer
10	530530029	WA	-122.45	47.19	8200	TACOMA, WA	Tacoma South L St	nephelometer
10	530530031	WA	-122.38	47.27	8200	TACOMA, WA	Tacoma Port Area	TEOM Gravimetric 50 deg
10	530531018	WA	-122.30	47.14	8200	TACOMA, WA	Puyallup	
10	530610005	WA	-122.32	47.81	7600	SEATTLE-BELLEVUE-EVERETT, WA	Lynnwood	nephelometer
10	530611007	WA	-122.17	48.06	7600	SEATTLE-BELLEVUE-EVERETT, WA	Marysville	nephelometer
10	530630016	WA	-117.36	47.66	7840	SPOKANE, WA	Spokane Ferry St	TEOM Gravimetric 50 deg
10	530650004	WA	-117.90	48.54	0	NOT IN AN MSA	Colville	nephelometer
10	530670013	WA	-122.82	47.03	5910	OLYMPIA, WA	Lacey	nephelometer
10	530730015	WA	-122.44	48.76	860	BELLINGHAM, WA	Bellingham	nephelometer
10	530750003	WA	-117.18	46.72	0	NOT IN AN MSA	Pullman	nephelometer
10	530750006	WA	-117.37	47.23	0	NOT IN AN MSA	Rosalia	nephelometer

Table B2. Canada Ground Station Sites

Station ID	Province	Lon	Lat	Station Name
000040103	NB			FREDERICTON
000040203	NB	-66.01	45.31	FOREST HILLS
000040901	NB	-67.08	45.09	ST ANDREWS
000050105	QC	-73.58	45.50	Drummond
000050110	QC	-73.64	45.59	Montreal-Nord
000050126	QC	-73.93	45.43	STE-ANNE DE BELLEVU
000050128	QC	-73.75	45.47	AEROPORT DE MONTREAL
000050129	QC	-73.57	45.66	RIVI c8RE-DES-PRAIRIE
000050131	QC	-73.75	45.47	Hochelaga
000050308	QC	-71.22	46.82	DES SABLES
000050801	QC	-72.54	46.35	Ursulines
000051201	QC	-72.74	46.55	SHAWINIGAN
000052101	QC	-73.64	45.20	L'ACADIE
000052301	QC	-74.48	46.03	SAINT-FAUSTIN
000054401	QC	-74.28	45.12	ST-ANICET
000054501	QC	-73.44	45.81	LASSOMPTION
000054703	QC	-72.43	46.35	Becancour
000060104	ON	-75.68	45.43	Ottawa
000060204	ON	-83.04	42.31	Windsor Downtown
000060302	ON	-76.51	44.23	Kingston
000060424	ON	-79.39	43.66	Toronto Downtown
000060512	ON	-79.86	43.26	Hamilton Downtown
000060707	ON	-84.35	46.53	Sault Ste Marie
000061004	ON	-82.41	42.98	Sarnia
000061104	ON	-78.35	44.30	Peterborough
000061201	ON	-74.74	45.03	Cornwall
000061302	ON	-79.24	43.16	St. Catharines
000061502	ON	-80.50	43.44	Kitchener
000062001	ON	-79.45	46.32	North Bay
000062201	ON	-82.22	42.24	Merlin
000062501	ON	-81.58	44.30	Tiverton
000062601	ON	-80.27	42.85	Simcoe
000063301	ON	-78.93	45.22	Dorset
000063701	ON	-81.74	43.33	Grand Bend
000065001	ON	-79.39	44.39	Barrie
000065201	ON	-80.04	45.34	Parry Sound
000065301	ON	-81.16	42.67	Port Stanley
000065401	ON	-77.40	44.15	Belleville
000110119	BC	-122.98	49.22	Burnaby South
000111003	BC	-122.23	49.04	Abbotsford
000111101	BC	-121.94	49.16	Chilliwack
000111301	BC	-122.57	49.10	Langley

Region 1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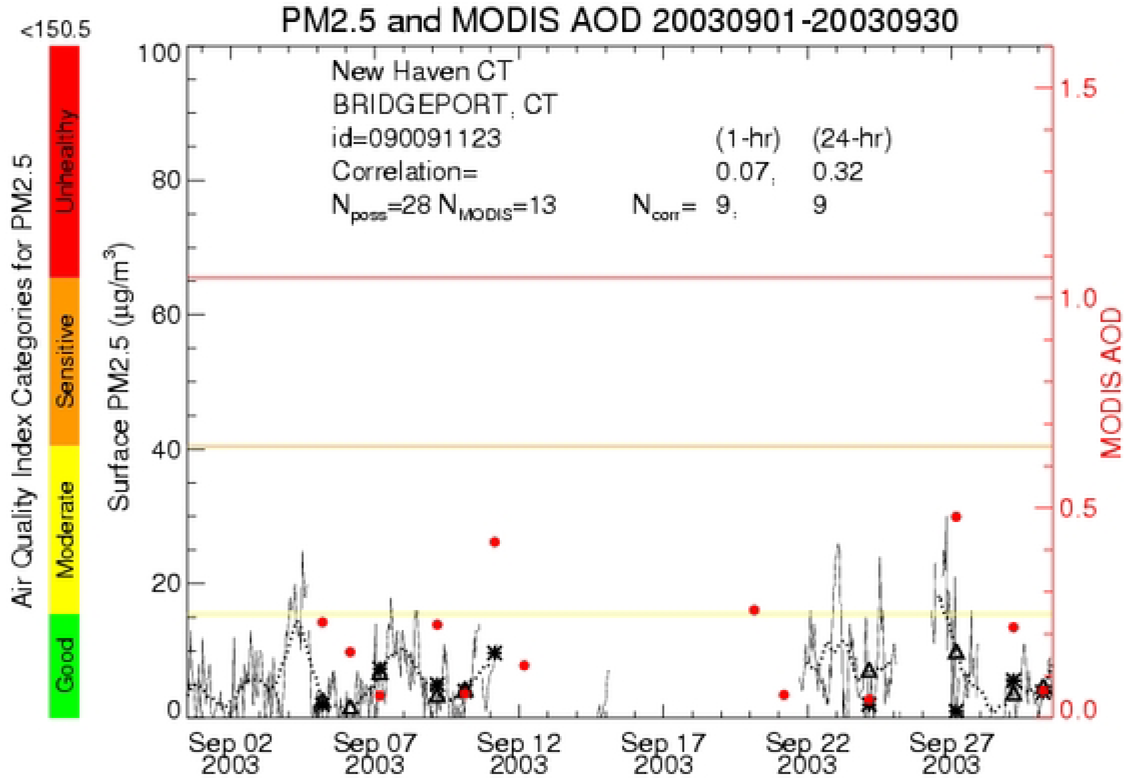
Hartford CT
HARTFORD, CT
id=090031018
(1-hr) (24-hr)
Correlation= 0.62, 0.41
N_{poss}=28 N_{MODIS}=15 N_{corr}= 10, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003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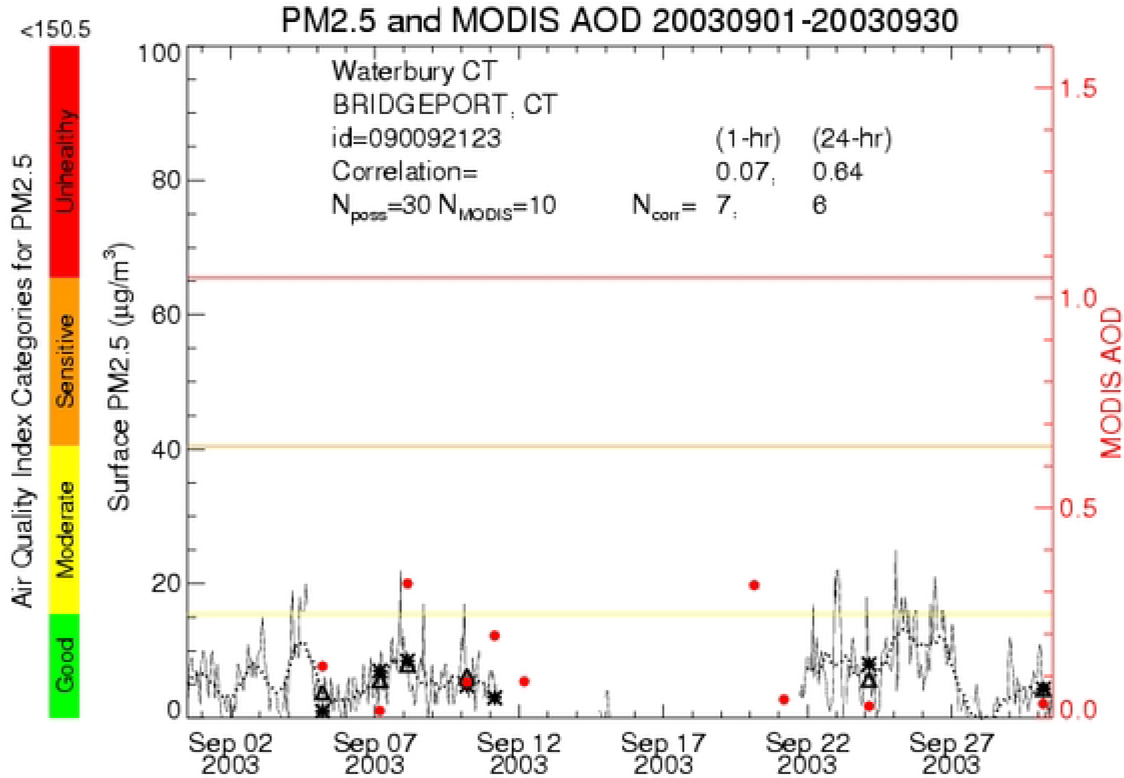
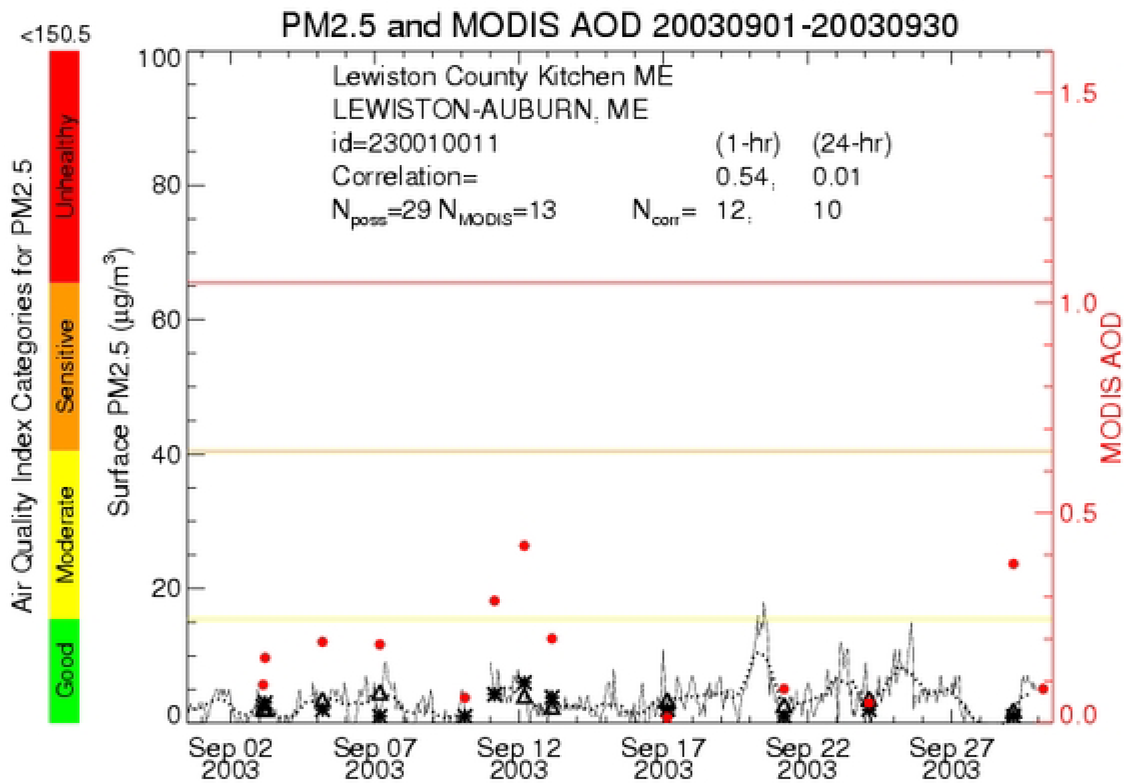
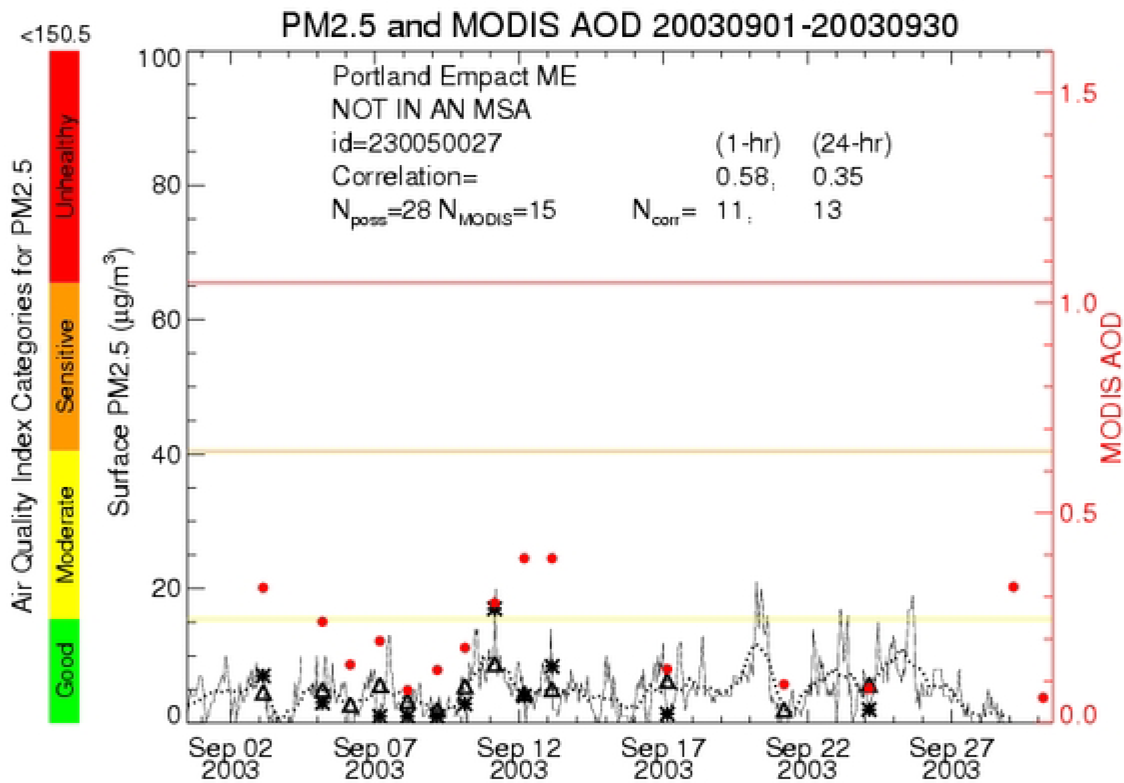
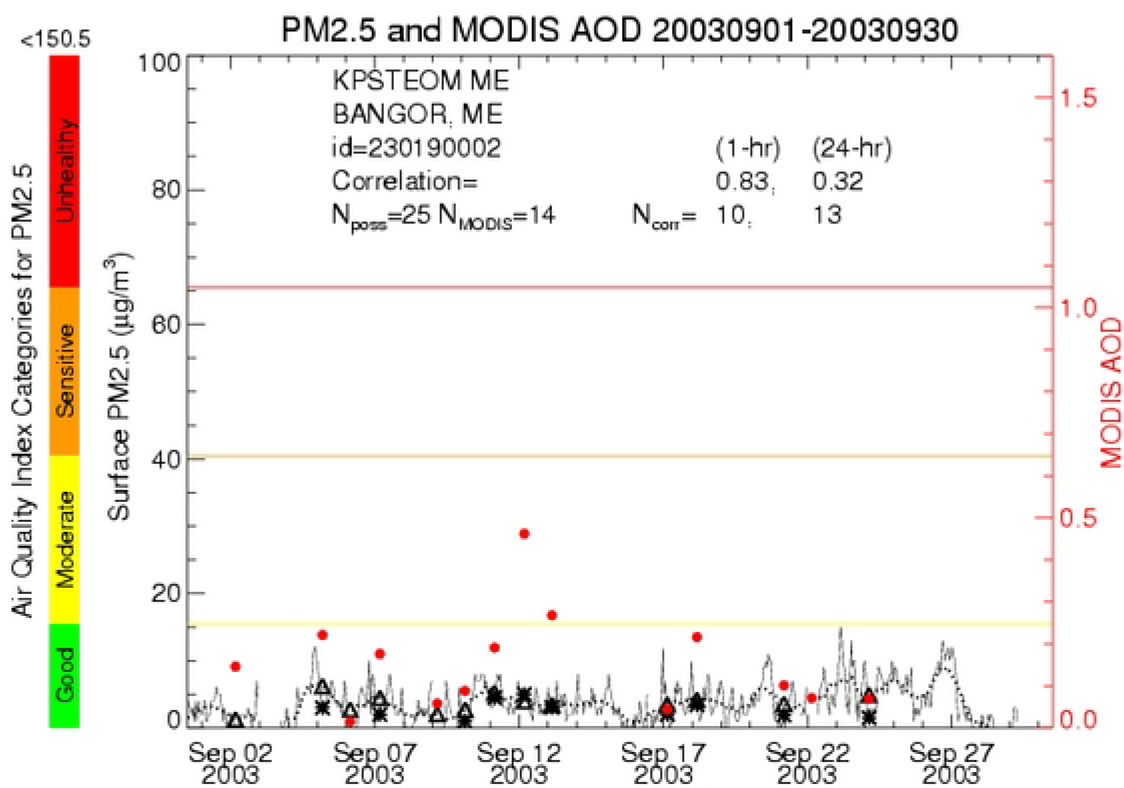
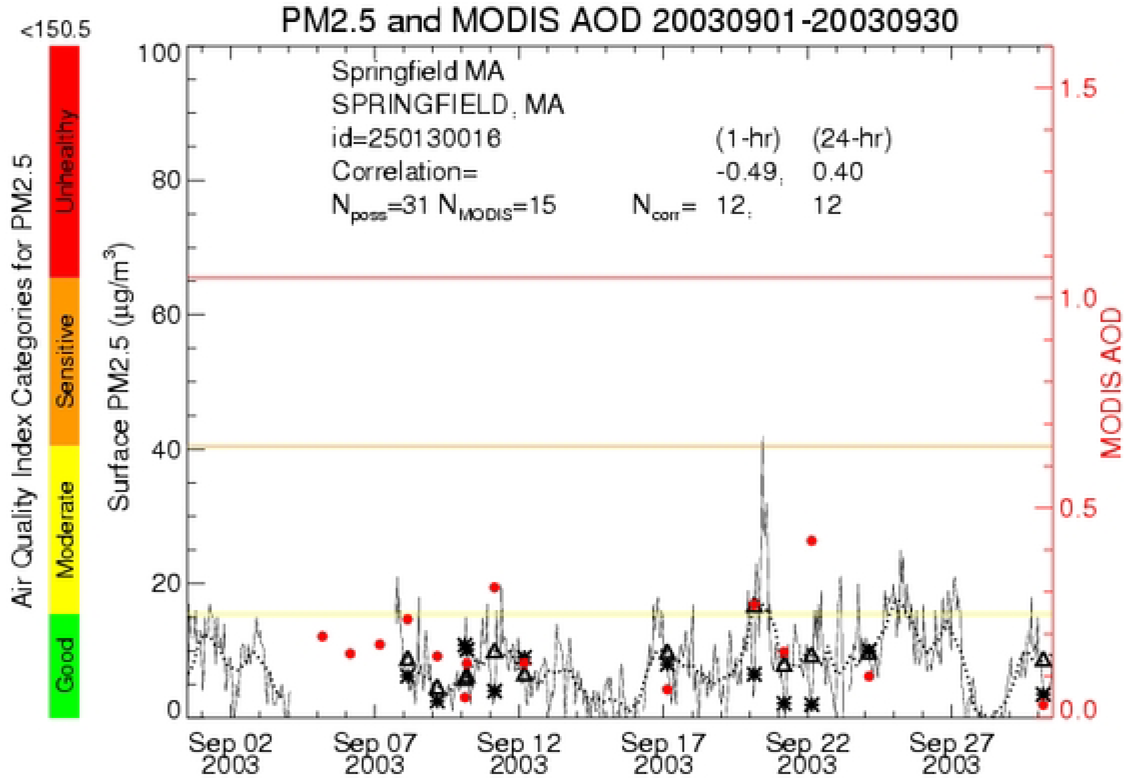
New Haven CT
BRIDGEPORT, CT
id=090091123
(1-hr) (24-hr)
Correlation= 0.07, 0.32
N_{poss}=28 N_{MODIS}=13 N_{corr}= 9, 9
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

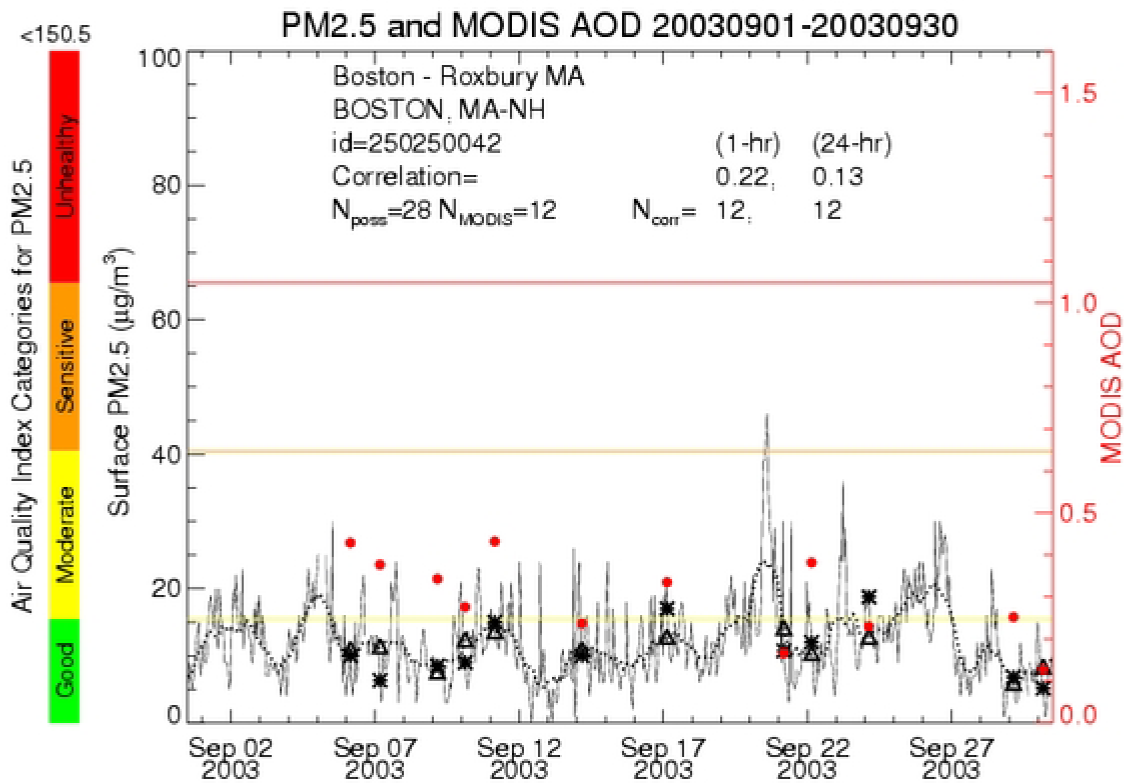

PM2.5 and MODIS AOD 20030901-20030930
Waterbury CT
BRIDGEPORT, CT
id=090092123
(1-hr) (24-hr)
Correlation= 0.07, 0.64
N_{poss}=30 N_{MODIS}=10 N_{corr}= 7, 6
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Lewiston County Kitchen ME
LEWISTON-AUBURN, ME
id=230010011
(1-hr) (24-hr)
Correlation= 0.54, 0.01
N_{poss}=29 N_{MODIS}=13 N_{corr}= 12, 10
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Portland Empact ME
NOT IN AN MSA
id=230050027
Correlation=
(1-hr) (24-hr)
0.58, 0.35
N_{poss}=28 N_{MODIS}=15
N_{corr}= 11, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
KPSTEOM ME
BANGOR, ME
id=230190002
Correlation=
(1-hr) (24-hr)
0.83, 0.32
N_{poss}=25 N_{MODIS}=14
N_{corr}= 10, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Springfield MA
SPRINGFIELD, MA
id=250130016 (1-hr) (24-hr)
Correlation= -0.49, 0.40
Nposs=31 NMODIS=15 Ncorr= 12, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003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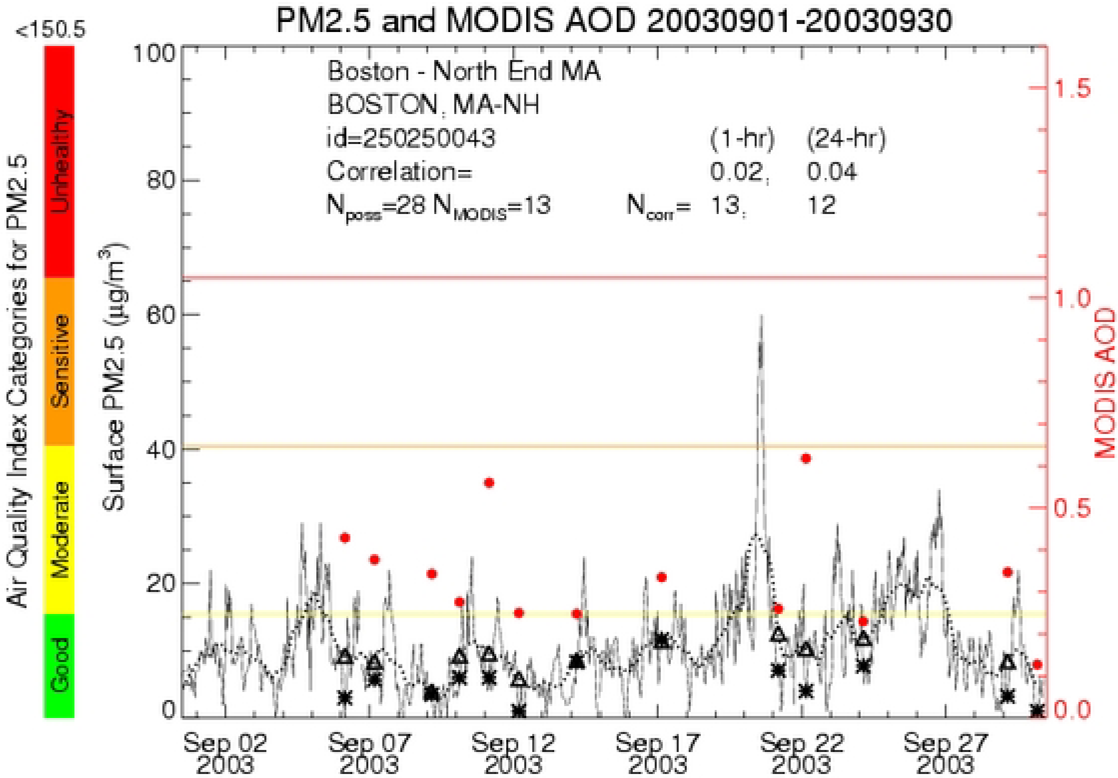
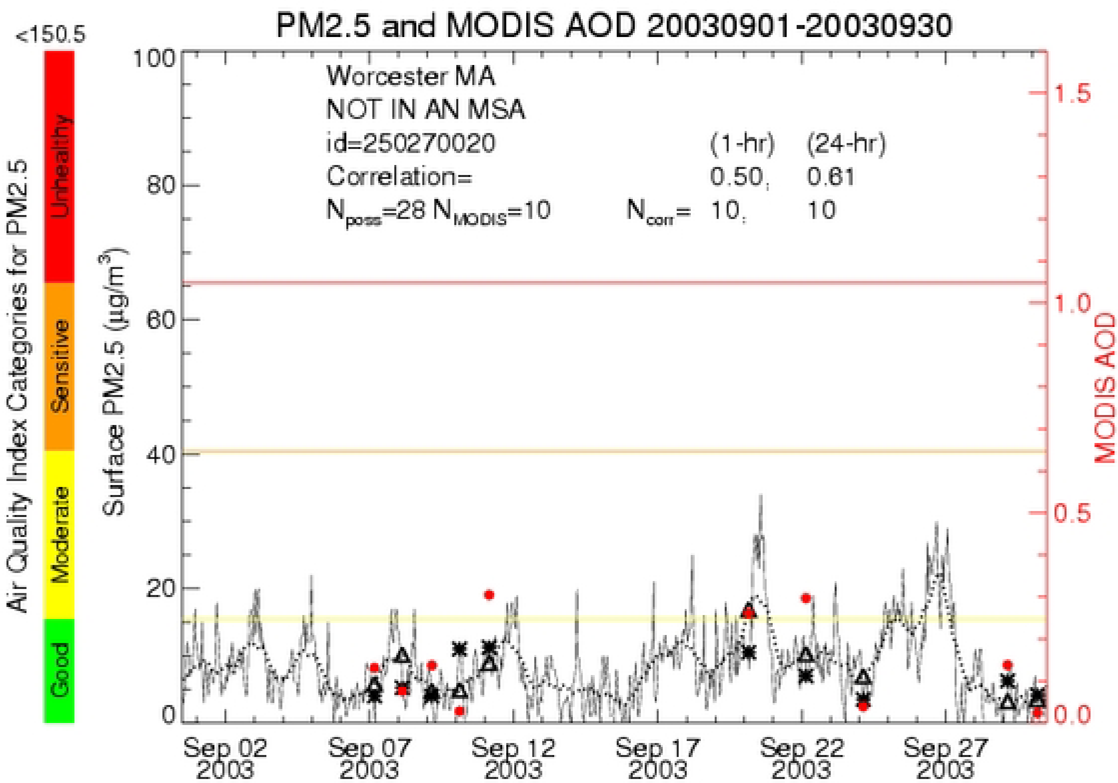
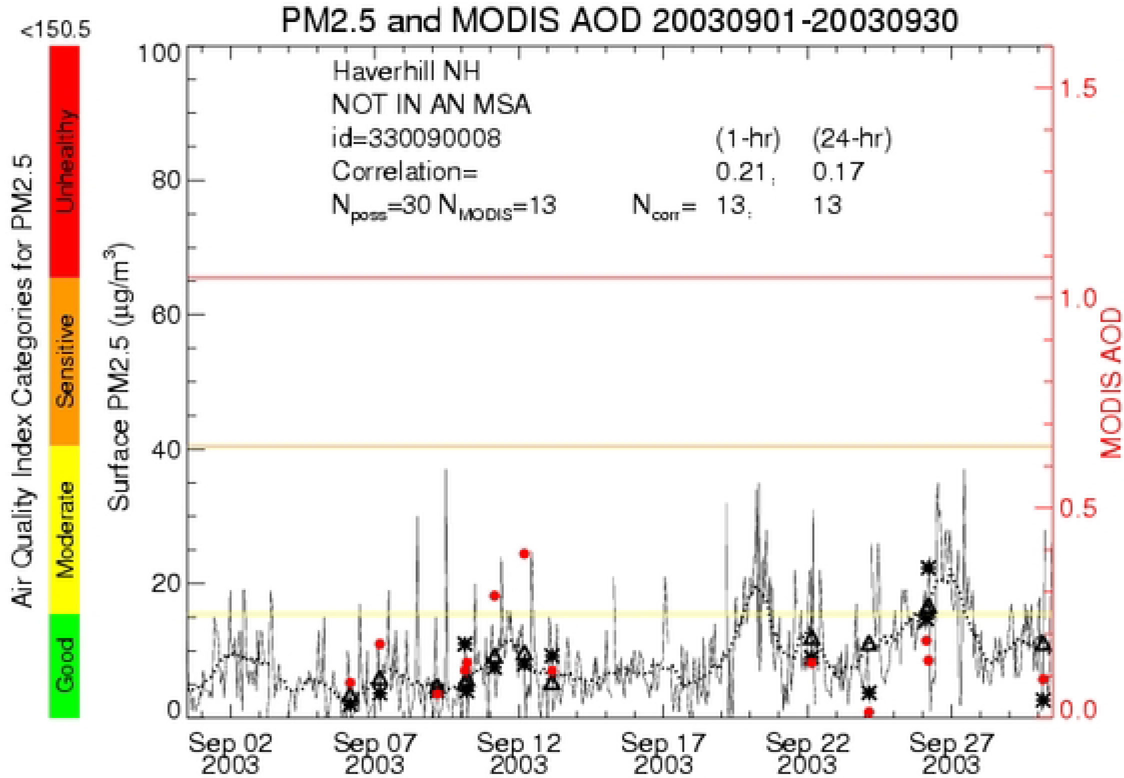
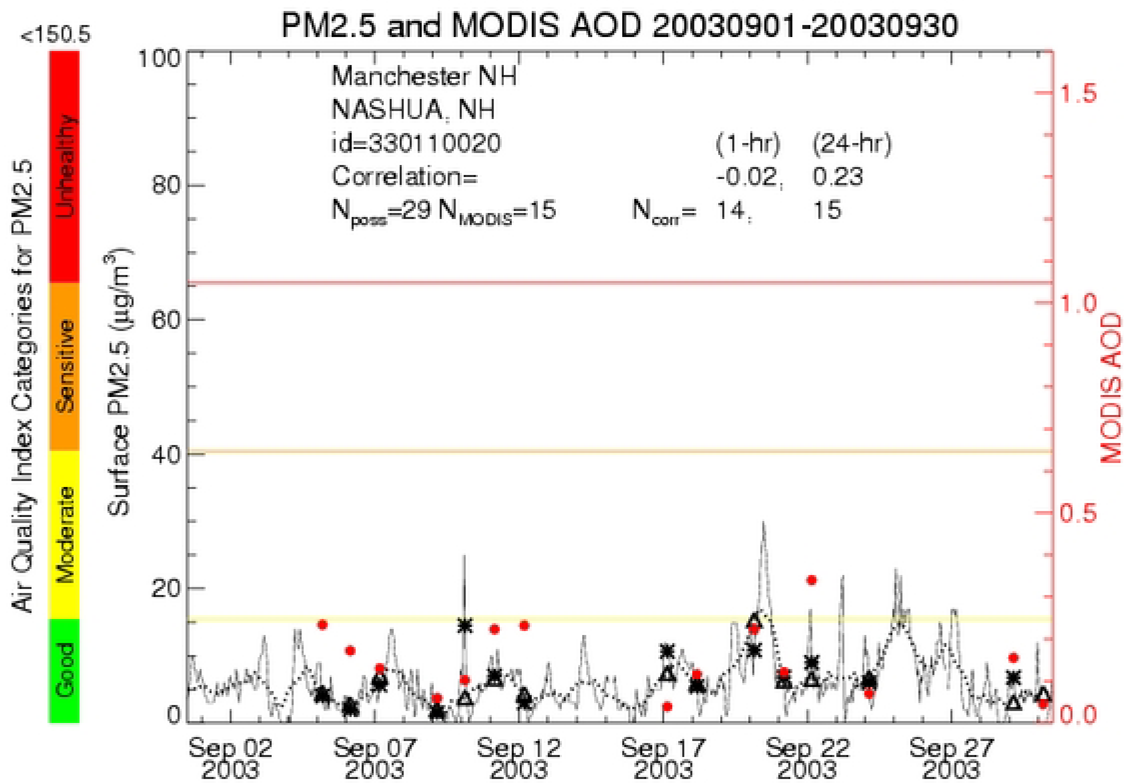
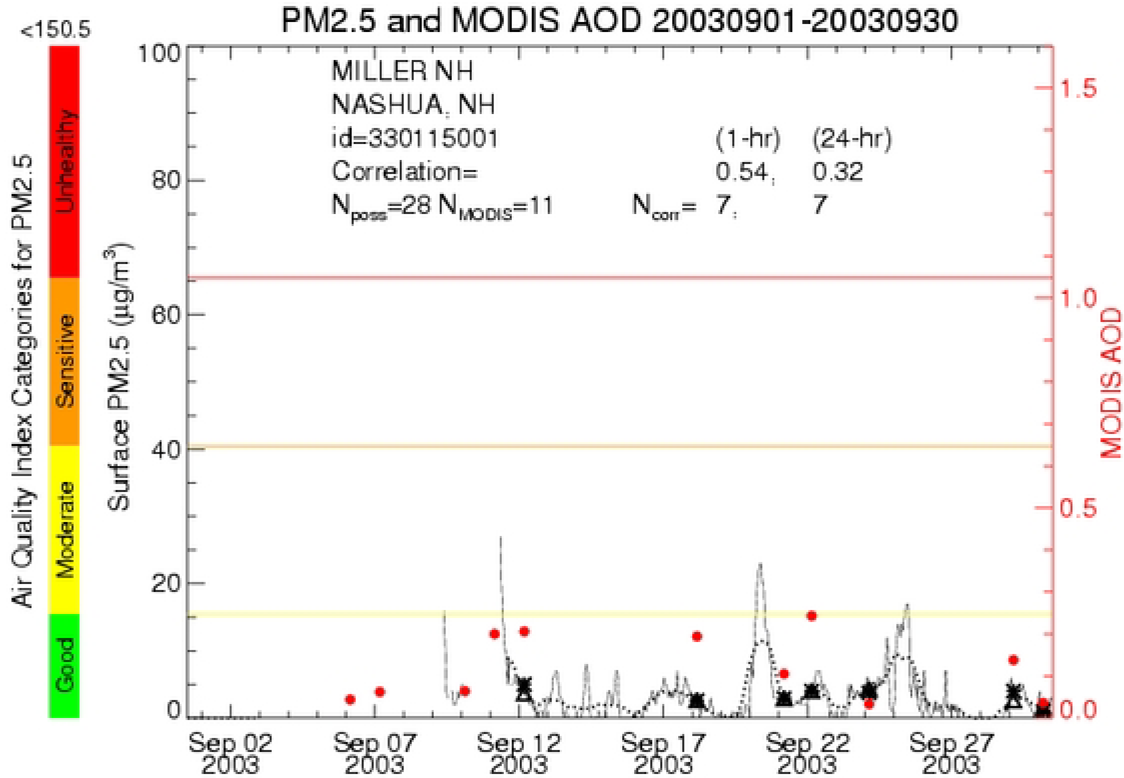
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Boston - Roxbury MA
BOSTON, MA-NH
id=250250042 (1-hr) (24-hr)
Correlation= 0.22, 0.13
Nposs=28 NMODIS=12 Ncorr= 12, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

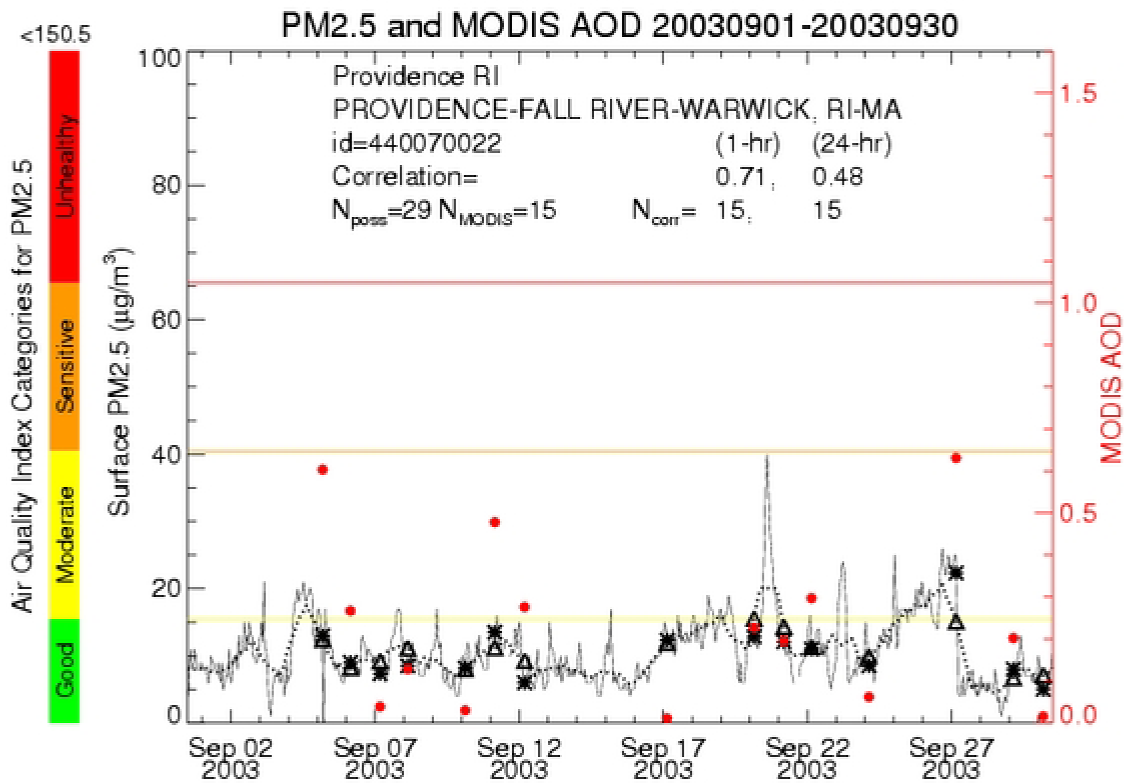

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Boston - North End MA
BOSTON, MA-NH
id=250250043
(1-hr) (24-hr)
Correlation= 0.02, 0.04
Nposs=28 NMODIS=13 Ncorr= 13, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

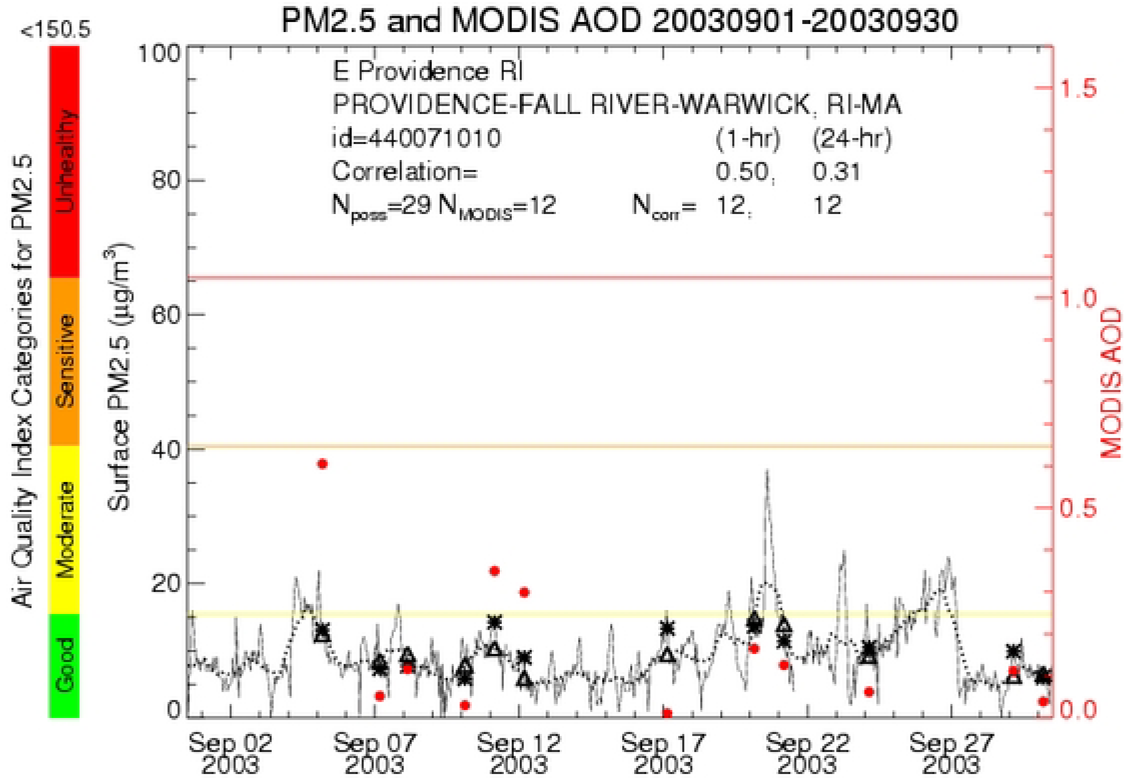

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Worcester MA
NOT IN AN MSA
id=250270020
(1-hr) (24-hr)
Correlation= 0.50, 0.61
Nposs=28 NMODIS=10 Ncorr= 10, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

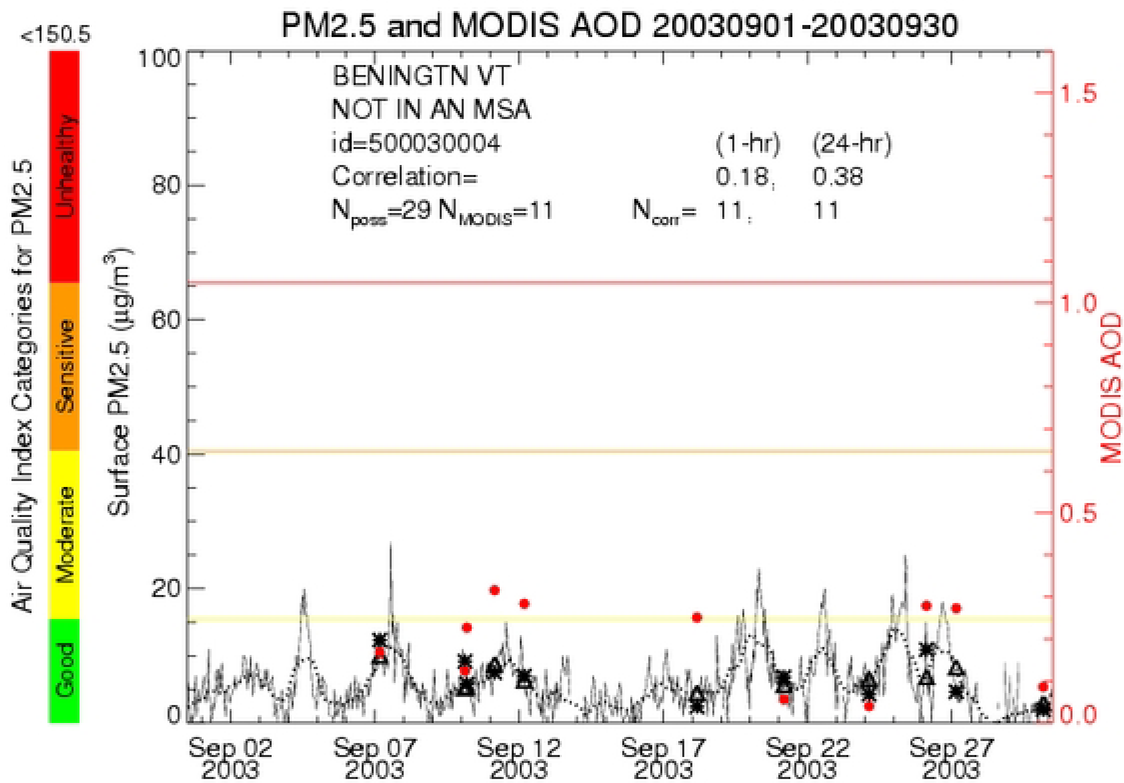

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Haverhill NH
NOT IN AN MSA
id=330090008
Correlation=
(1-hr) (24-hr)
0.21, 0.17
N_poss=30 N_MODIS=13 N_corr= 13, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

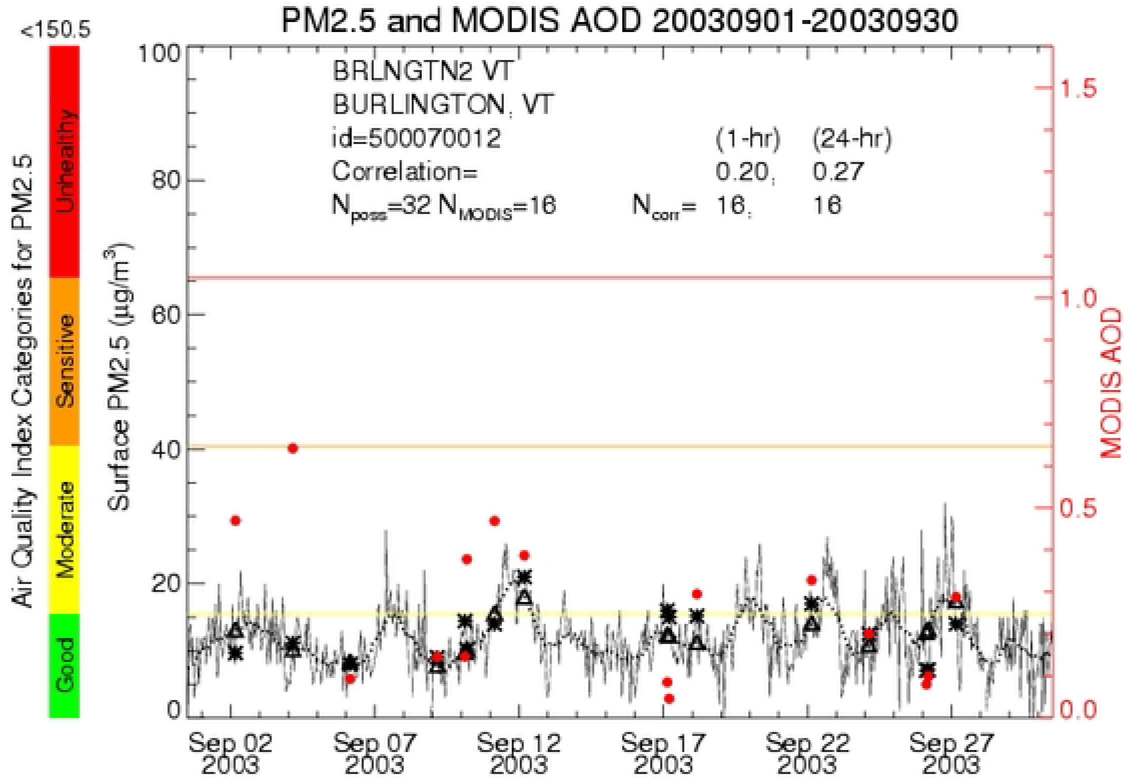

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Manchester NH
NASHUA, NH
id=330110020
Correlation=
(1-hr) (24-hr)
-0.02, 0.23
N_poss=29 N_MODIS=15 N_corr= 14, 15
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
MILLER NH
NASHUA, NH
id=330115001
(1-hr) (24-hr)
Correlation= 0.54, 0.32
N_poss=28 N_MODIS=11 N_corr= 7, 7
<150.5
Air Quality Index Categories for PM2.5
Good
Moderate
Sensitive
Unhealthy
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

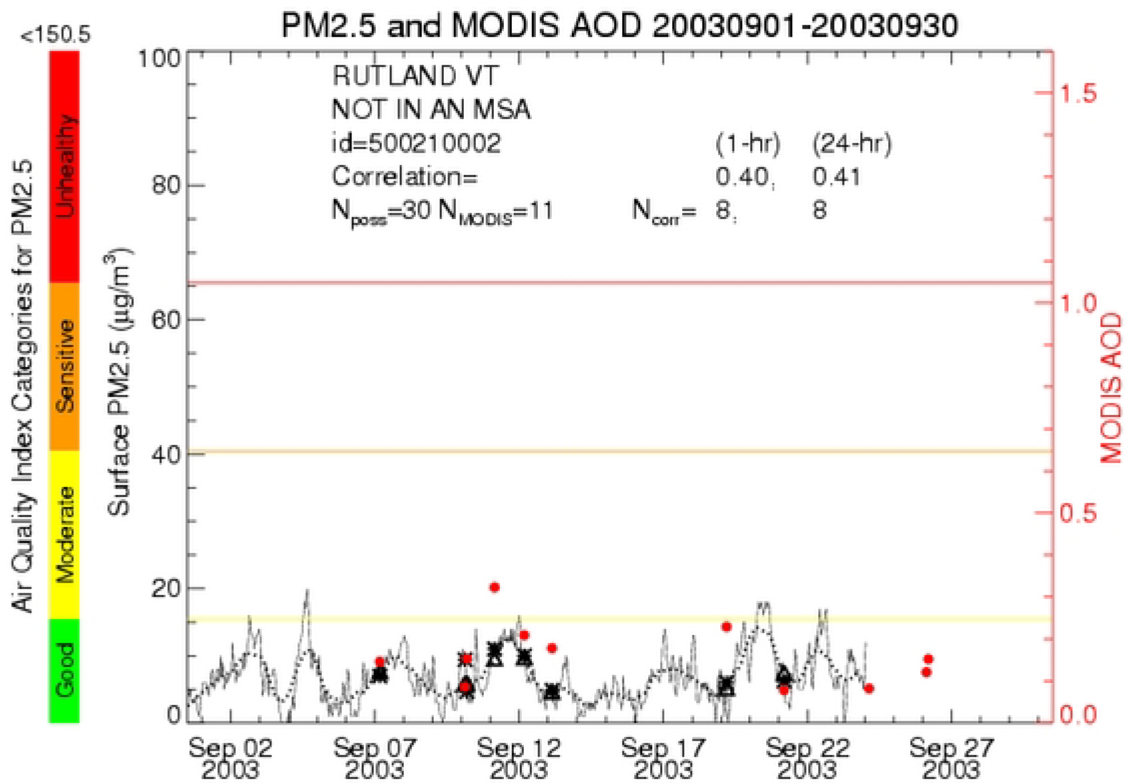

PM2.5 and MODIS AOD 20030901-20030930
Providence RI
PROVIDENCE-FALL RIVER-WARWICK, RI-MA
id=440070022
(1-hr) (24-hr)
Correlation= 0.71, 0.48
N_poss=29 N_MODIS=15 N_corr= 15, 15
<150.5
Air Quality Index Categories for PM2.5
Good
Moderate
Sensitive
Unhealthy
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
E Providence RI
PROVIDENCE-FALL RIVER-WARWICK, RI-MA
id=440071010 (1-hr) (24-hr)
Correlation= 0.50, 0.31
N_poss=29 N_MODIS=12 N_corr= 12, 12
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
BENINGTN VT
NOT IN AN MSA
id=500030004 (1-hr) (24-hr)
Correlation= 0.18, 0.38
N_poss=29 N_MODIS=11 N_corr= 11, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

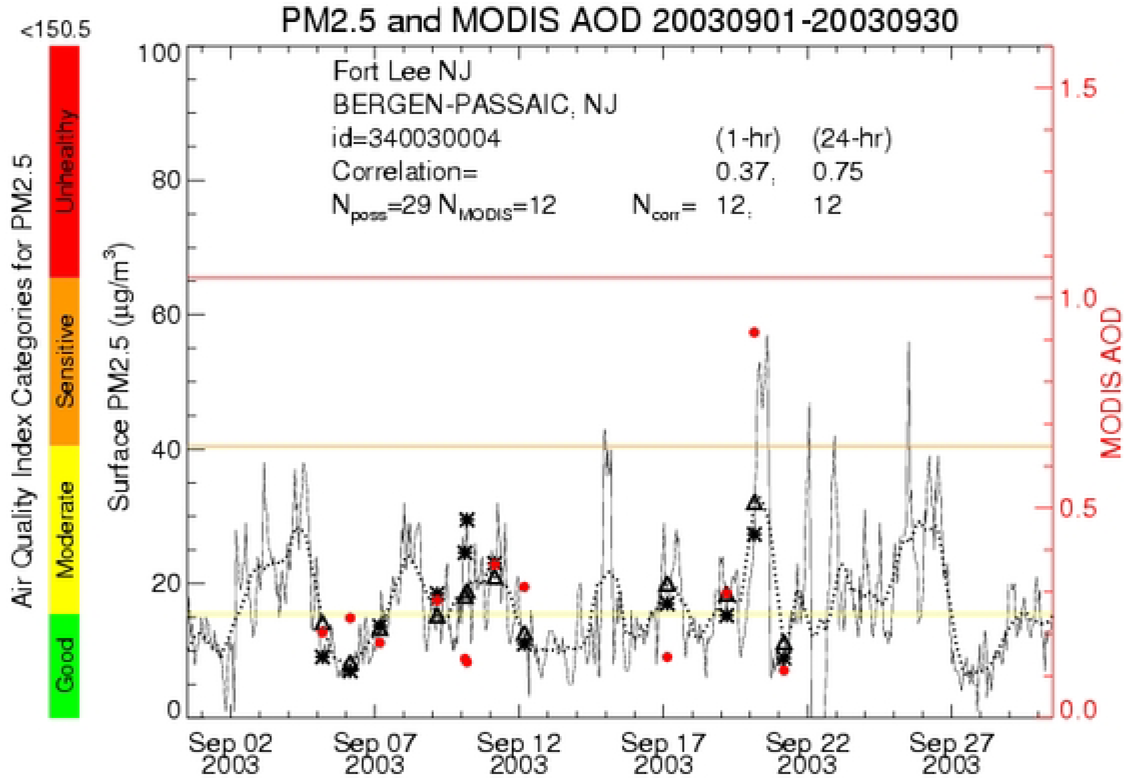


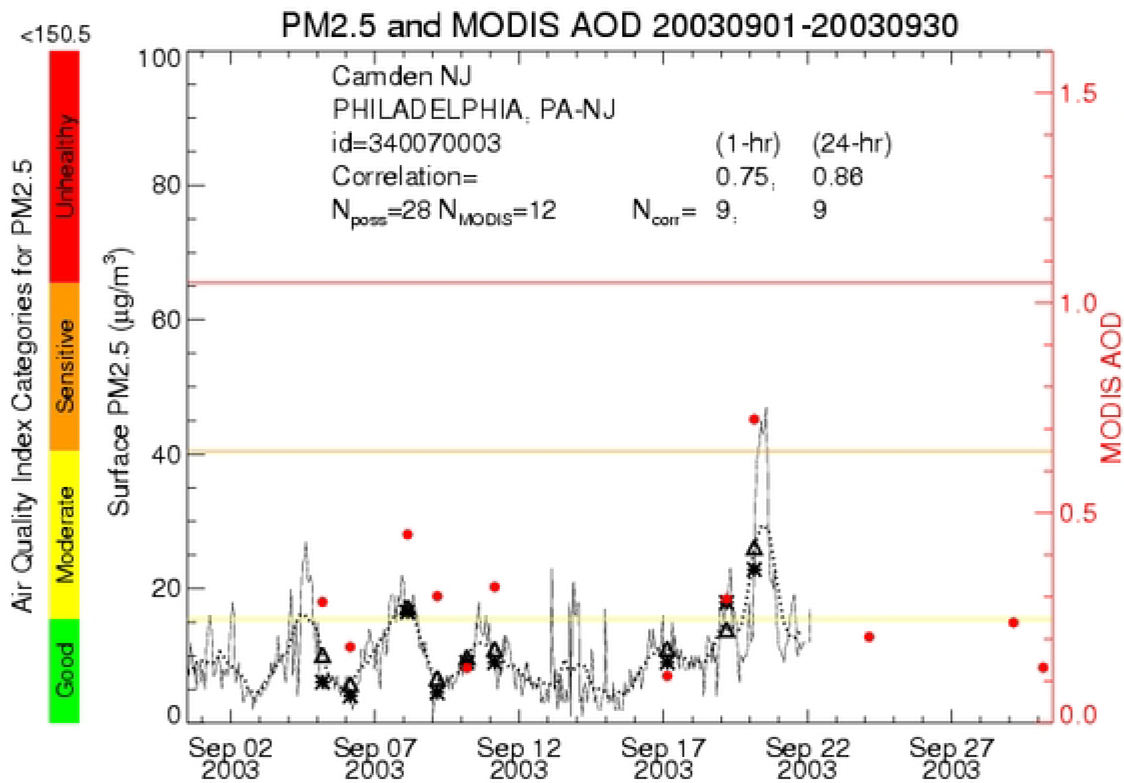
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
BRLNGTN2 VT
BURLINGTON, VT
id=500070012
(1-hr) (24-hr)
Correlation= 0.20, 0.27
N_poss=32 N_MODIS=16 N_corr= 16, 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

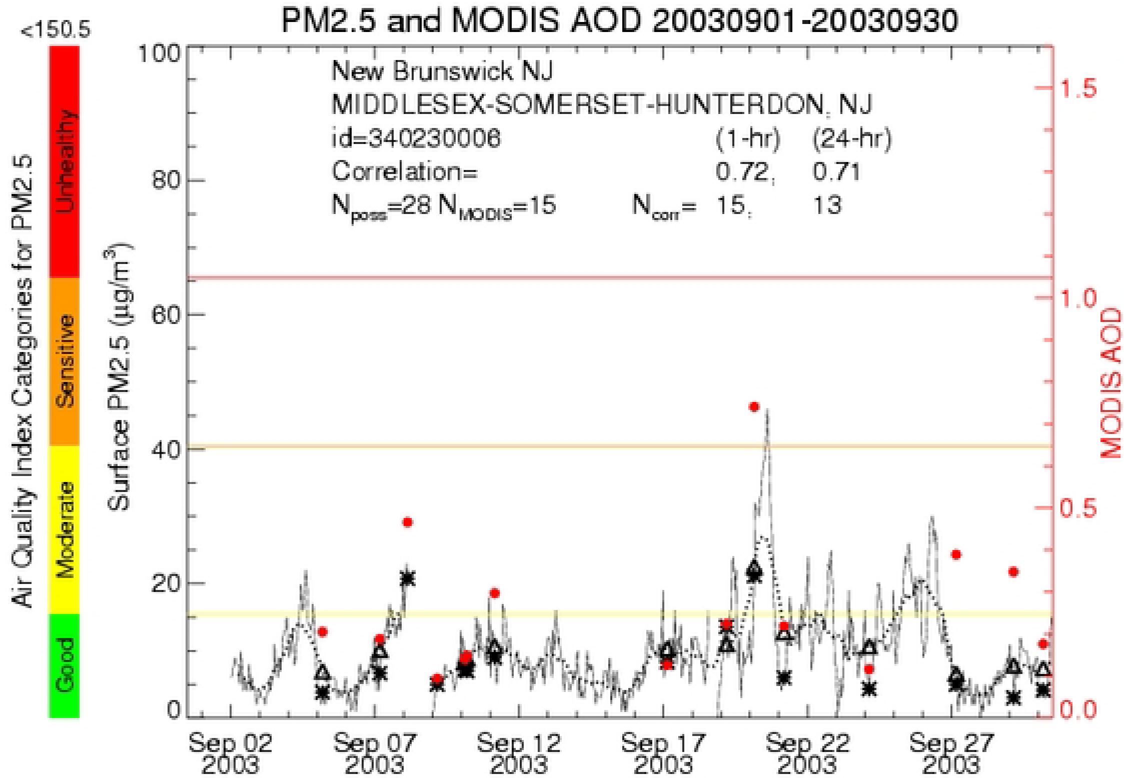


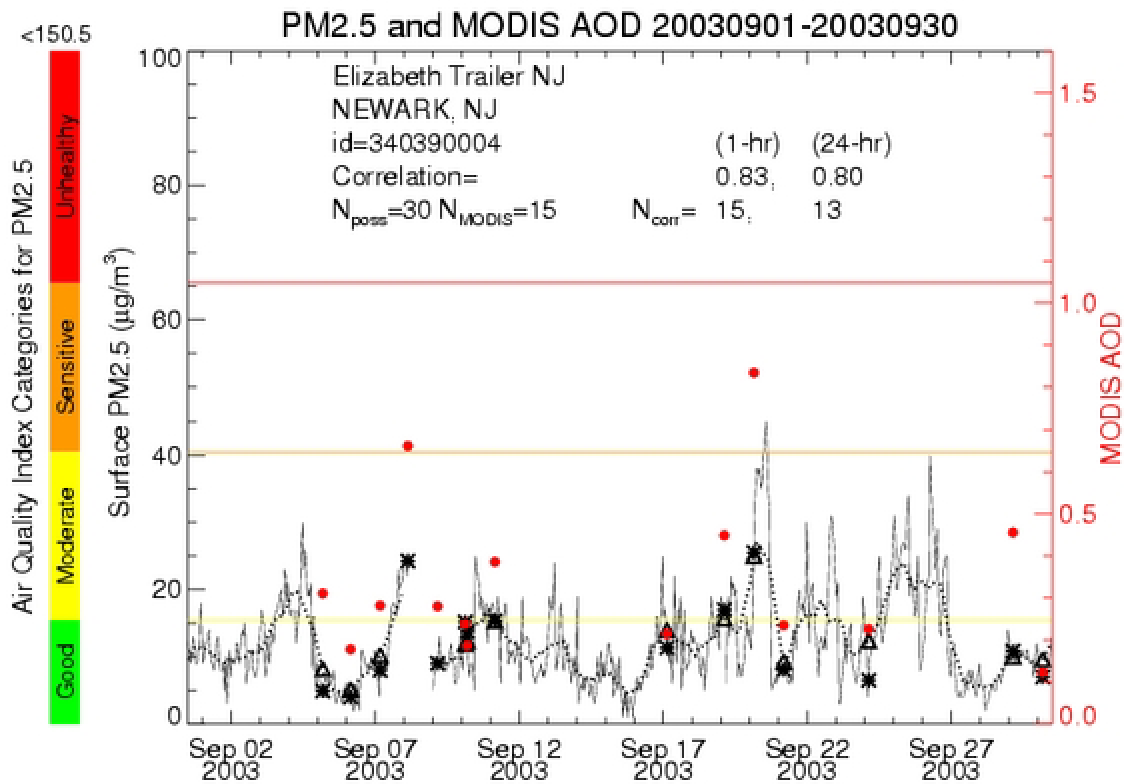
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
RUTLAND VT
NOT IN AN MSA
id=500210002
(1-hr) (24-hr)
Correlation= 0.40, 0.41
N_poss=30 N_MODIS=11 N_corr= 8, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

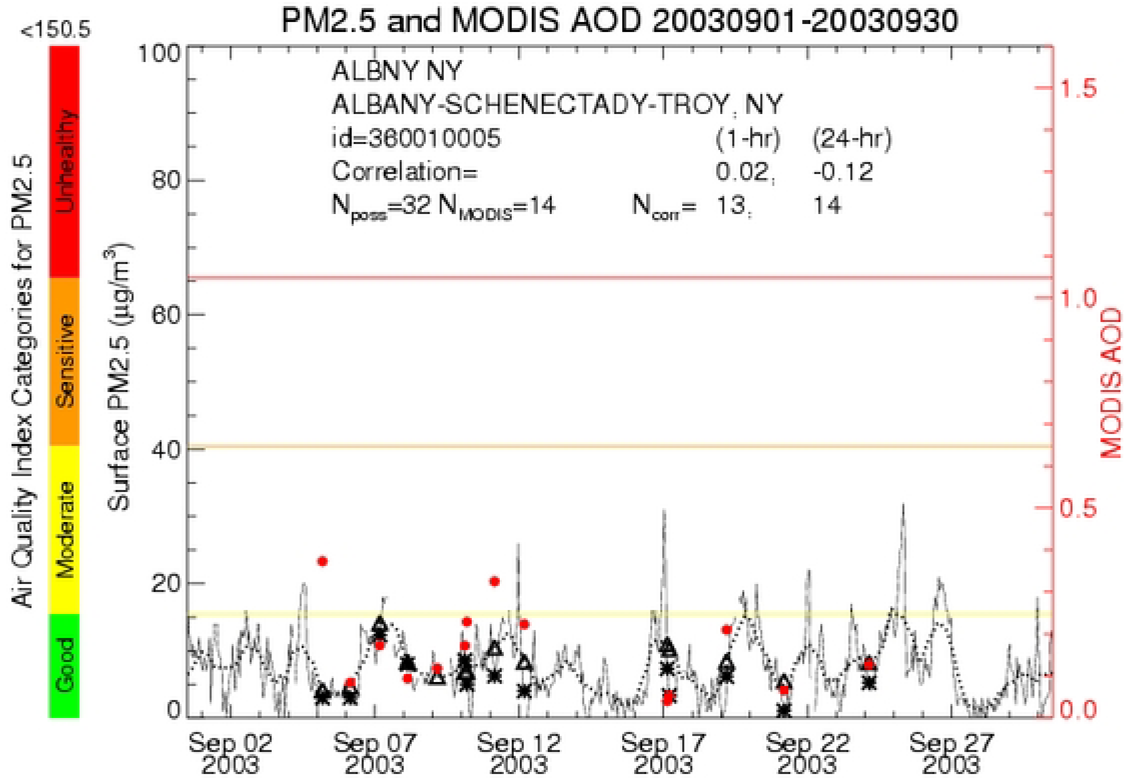
Region 2

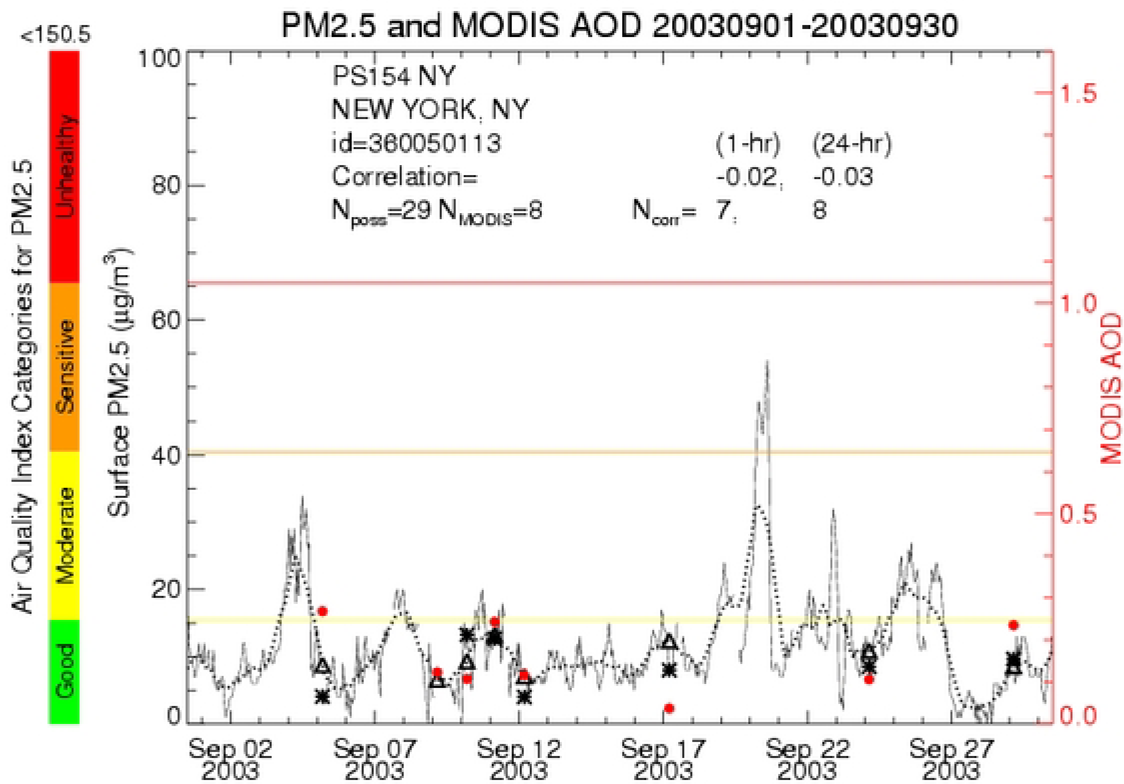

PM2.5 and MODIS AOD 20030901-20030930
Fort Lee NJ
BERGEN-PASSAIC, NJ
id=340030004
(1-hr) (24-hr)
Correlation= 0.37, 0.75
N_poss=29 N_MODIS=12 N_corr= 12, 12
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

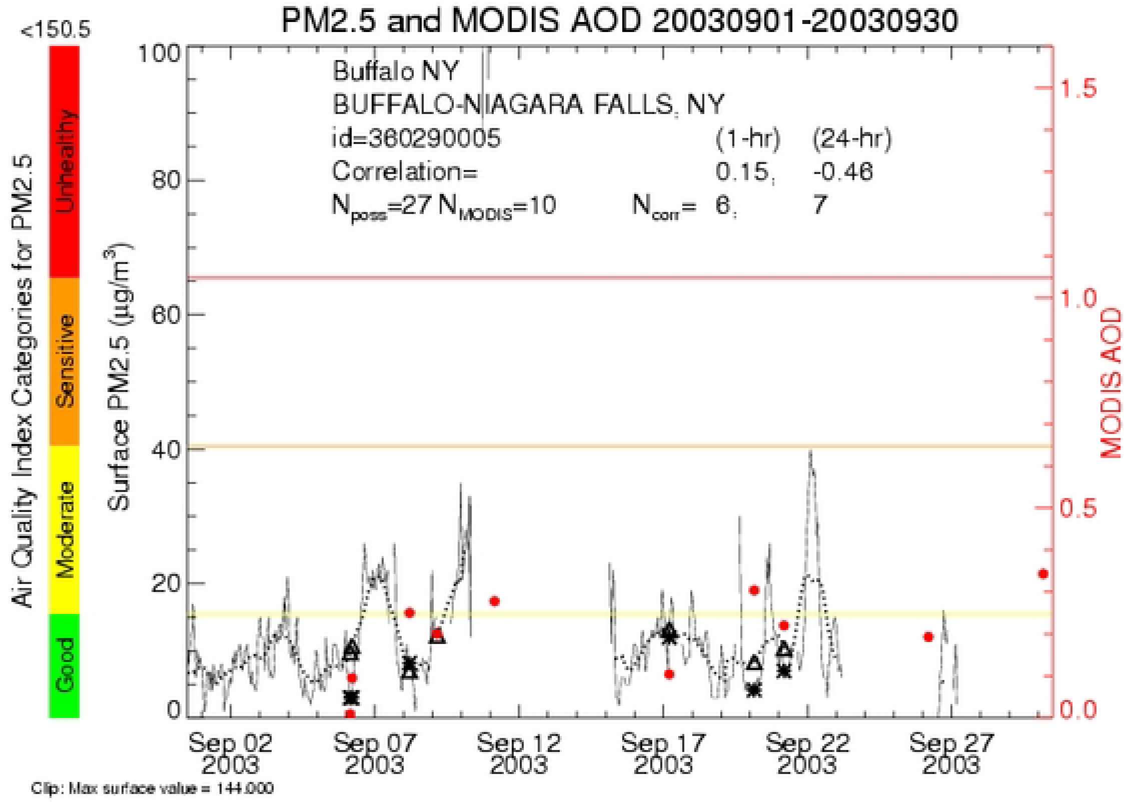

PM2.5 and MODIS AOD 20030901-20030930
Camden NJ
PHILADELPHIA, PA-NJ
id=340070003
(1-hr) (24-hr)
Correlation= 0.75, 0.86
N_poss=28 N_MODIS=12 N_corr= 9, 9
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

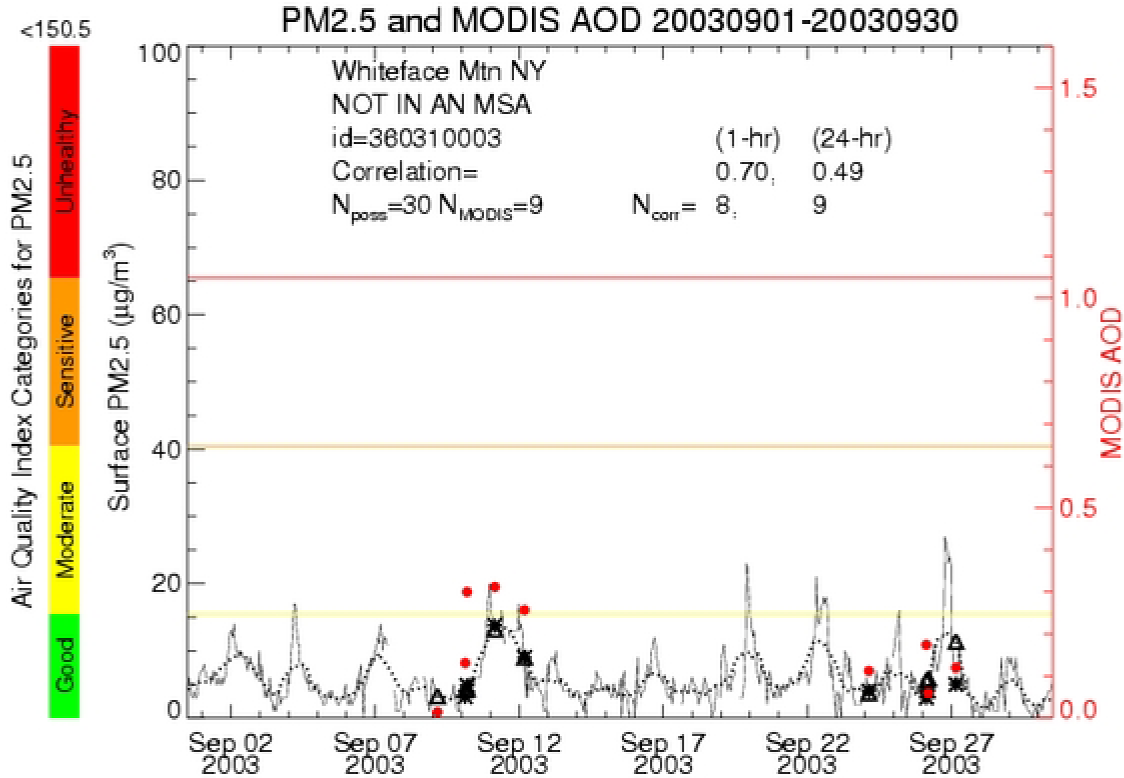

PM2.5 and MODIS AOD 20030901-20030930
New Brunswick NJ
MIDDLESEX-SOMERSET-HUNTERDON, NJ
id=340230006 (1-hr) (24-hr)
Correlation= 0.72, 0.71
N poss=28 N MODIS=15 N corr= 15, 13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

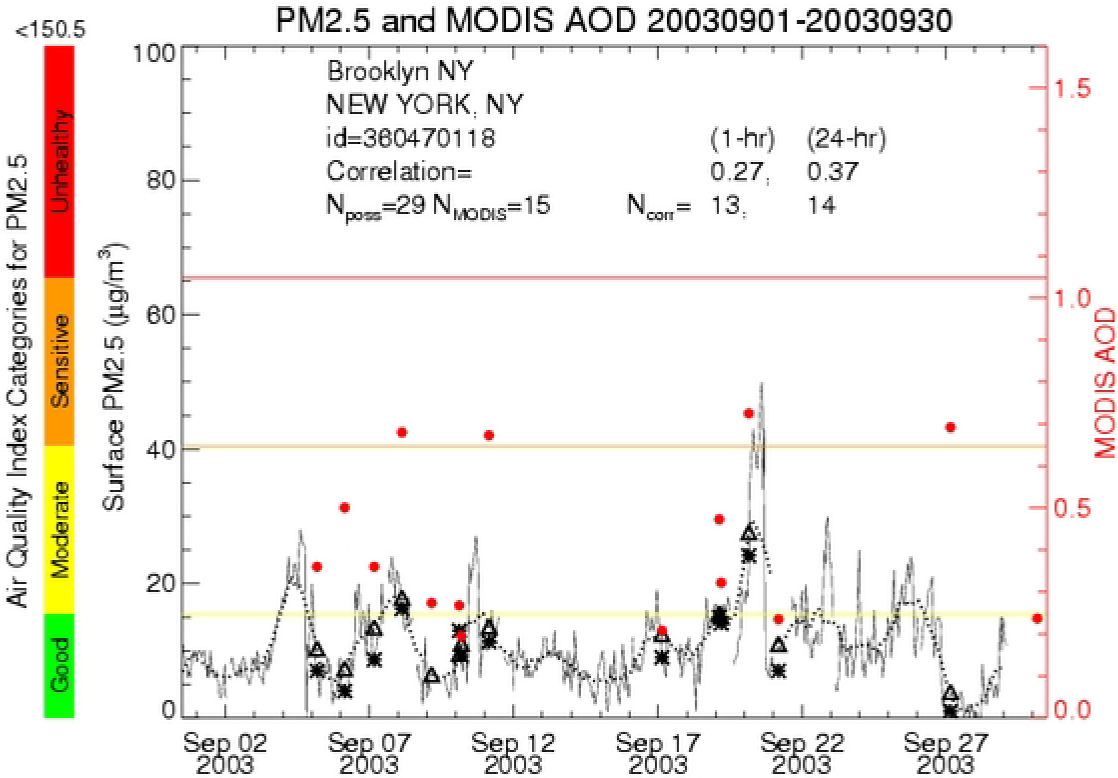

PM2.5 and MODIS AOD 20030901-20030930
Elizabeth Trailer NJ
NEWARK, NJ
id=340390004 (1-hr) (24-hr)
Correlation= 0.83, 0.80
N poss=30 N MODIS=15 N corr= 15, 13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

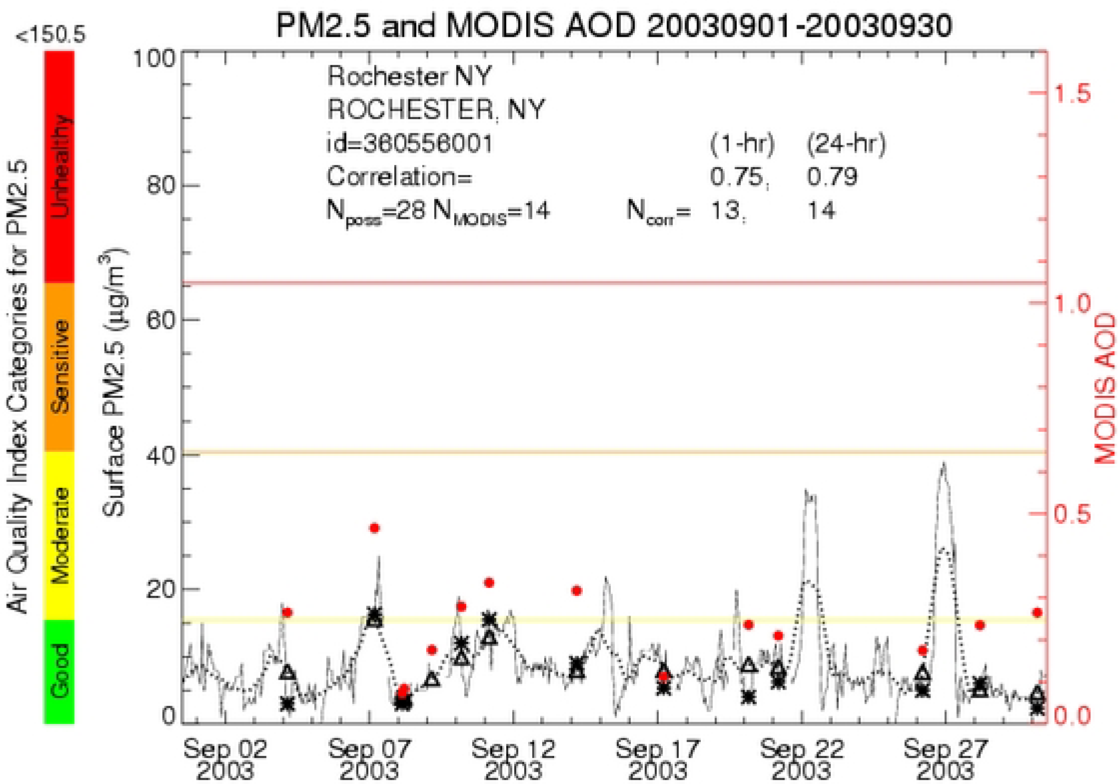

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
ALBNY NY
ALBANY-SCHENECTADY-TROY, NY
id=360010005 (1-hr) (24-hr)
Correlation= 0.02, -0.12
N_poss=32 N_MODIS=14 N_corr= 13, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

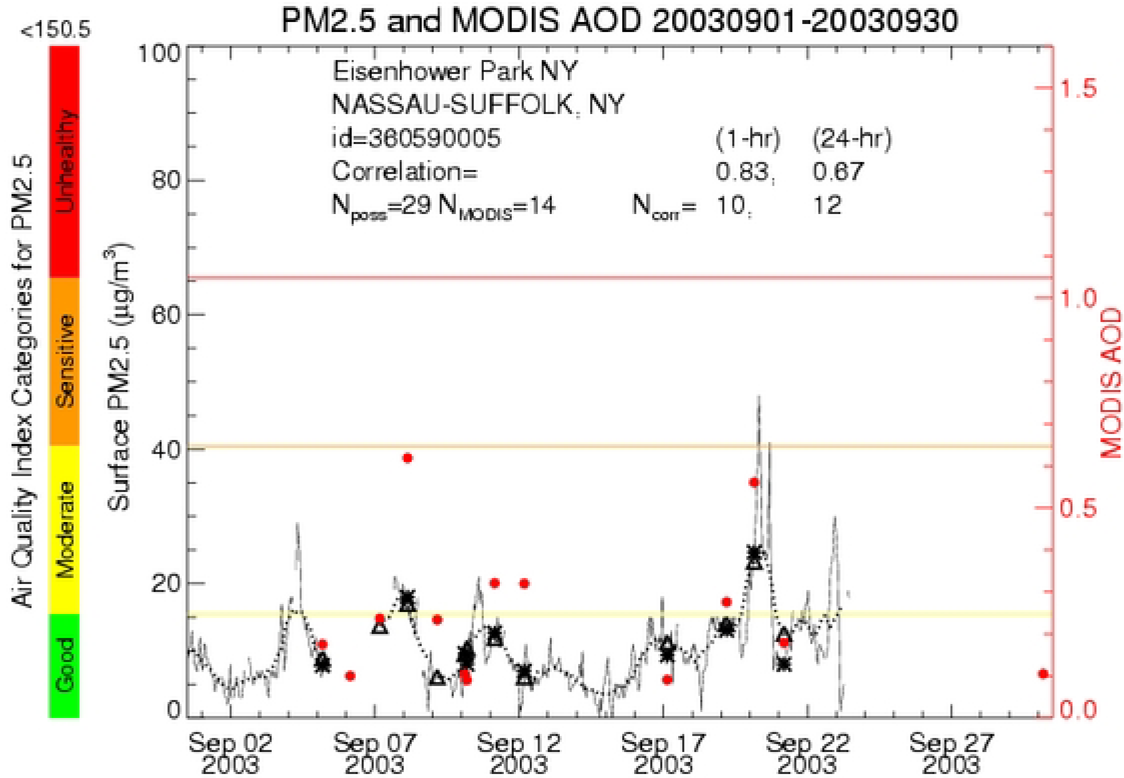

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
PS154 NY
NEW YORK, NY
id=360050113 (1-hr) (24-hr)
Correlation= -0.02, -0.03
N_poss=29 N_MODIS=8 N_corr= 7, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

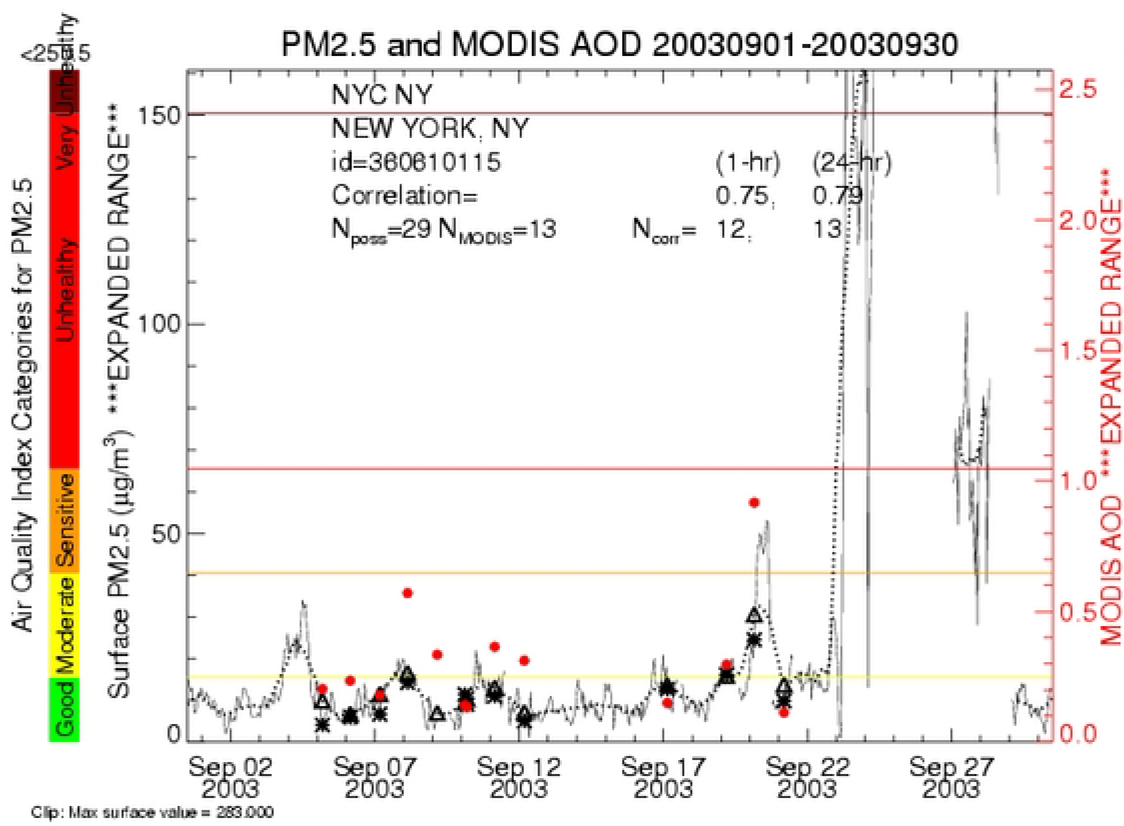

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Buffalo NY
BUFFALO-NIAGARA FALLS, NY
id=360290005
(1-hr) (24-hr)
Correlation= 0.15, -0.46
N_poss=27 N_MODIS=10 N_corr= 6, 7
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 144.000

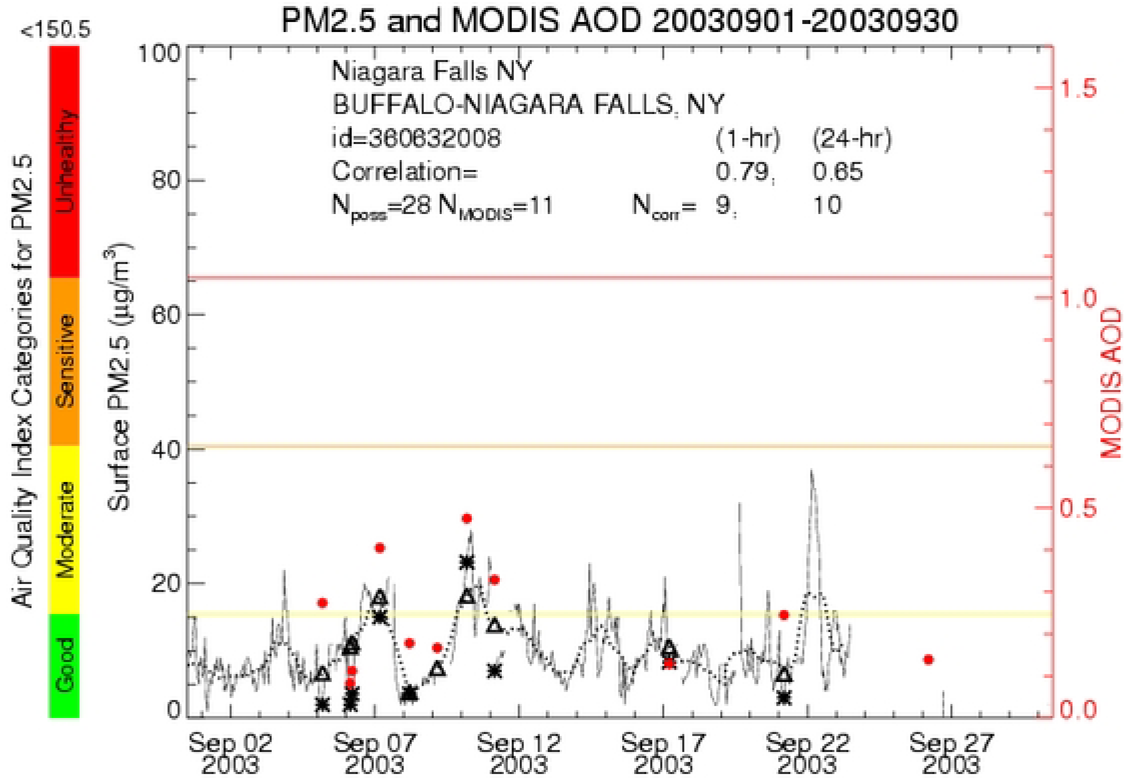

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Whiteface Mtn NY
NOT IN AN MSA
id=360310003
(1-hr) (24-hr)
Correlation= 0.70, 0.49
N_poss=30 N_MODIS=9 N_corr= 8, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

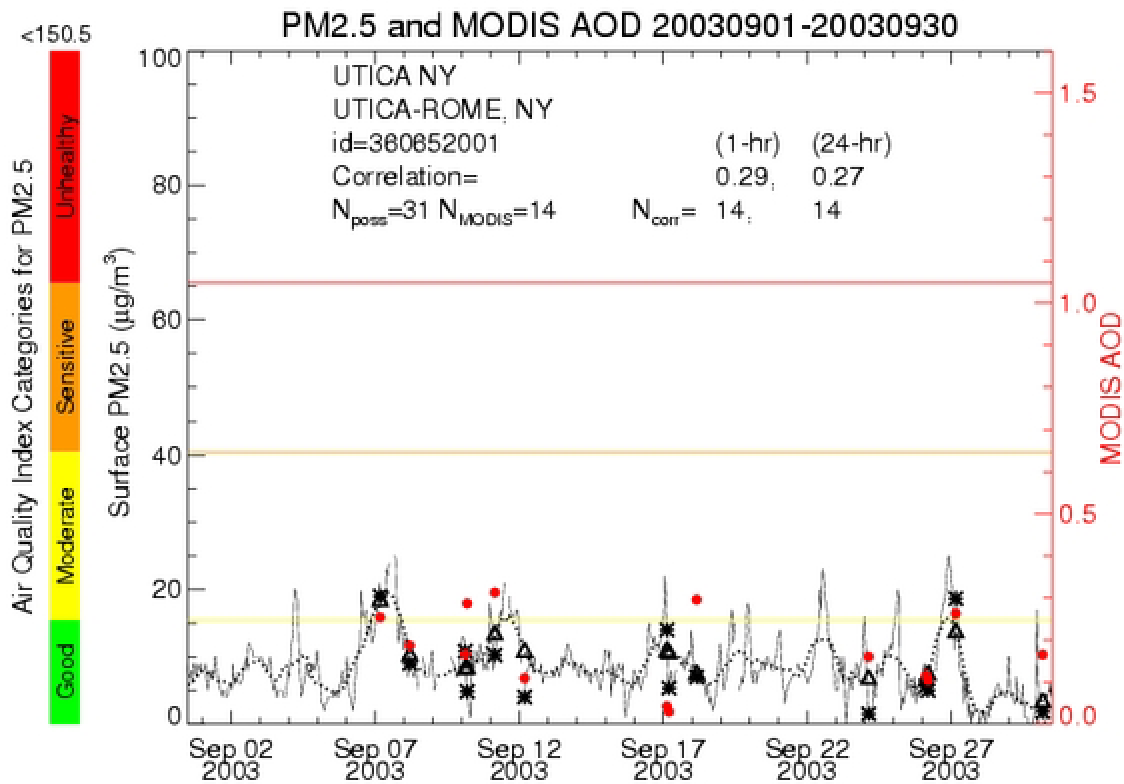

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Brooklyn NY
NEW YORK, NY
id=360470118
Correlation=
N_{poss}=29 N_{MODIS}=15
(1-hr) (24-hr)
0.27, 0.37
N_{corr}= 13, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

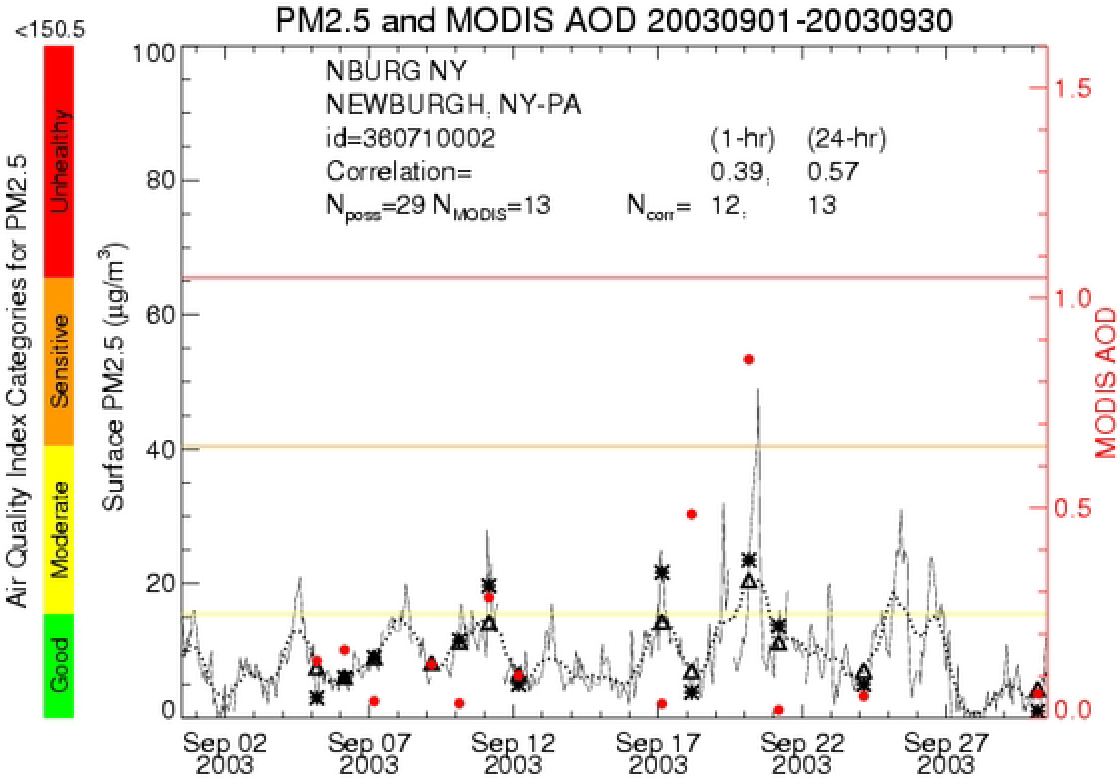

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Rochester NY
ROCHESTER, NY
id=360556001
Correlation=
N_{poss}=28 N_{MODIS}=14
(1-hr) (24-hr)
0.75, 0.79
N_{corr}= 13, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

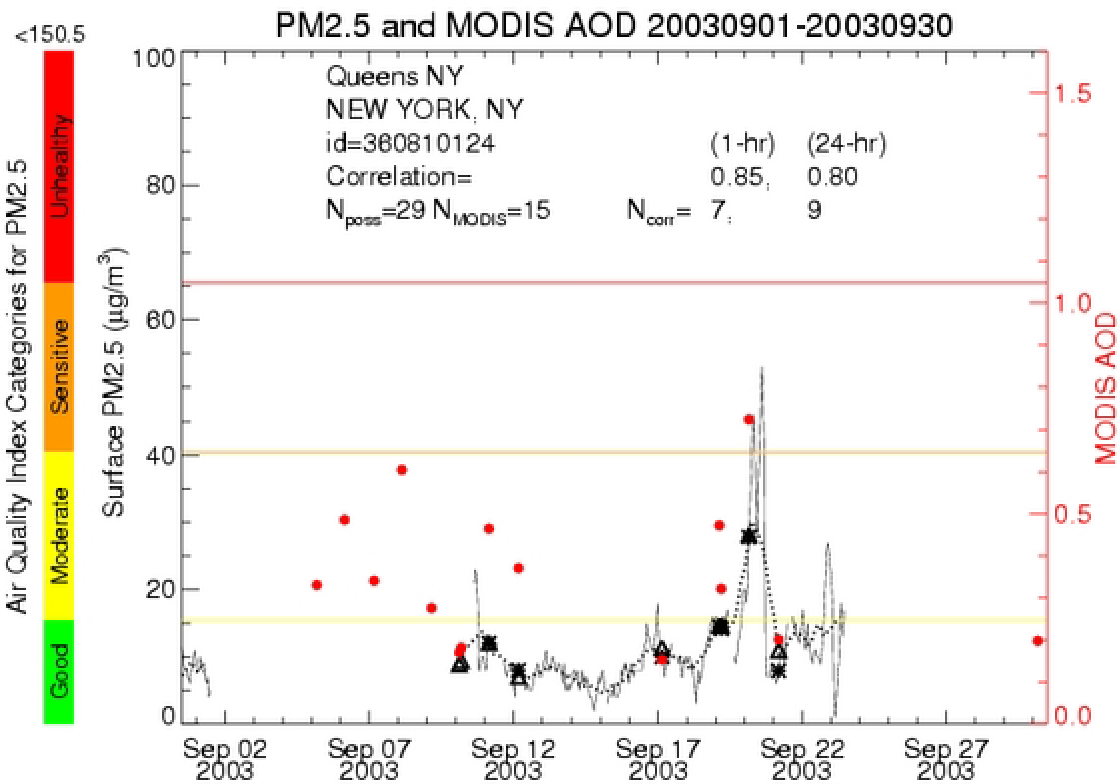

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Eisenhower Park NY
NASSAU-SUFFOLK, NY
id=360590005 (1-hr) (24-hr)
Correlation= 0.83, 0.67
Nposs=29 NMODIS=14 Ncorr= 10, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

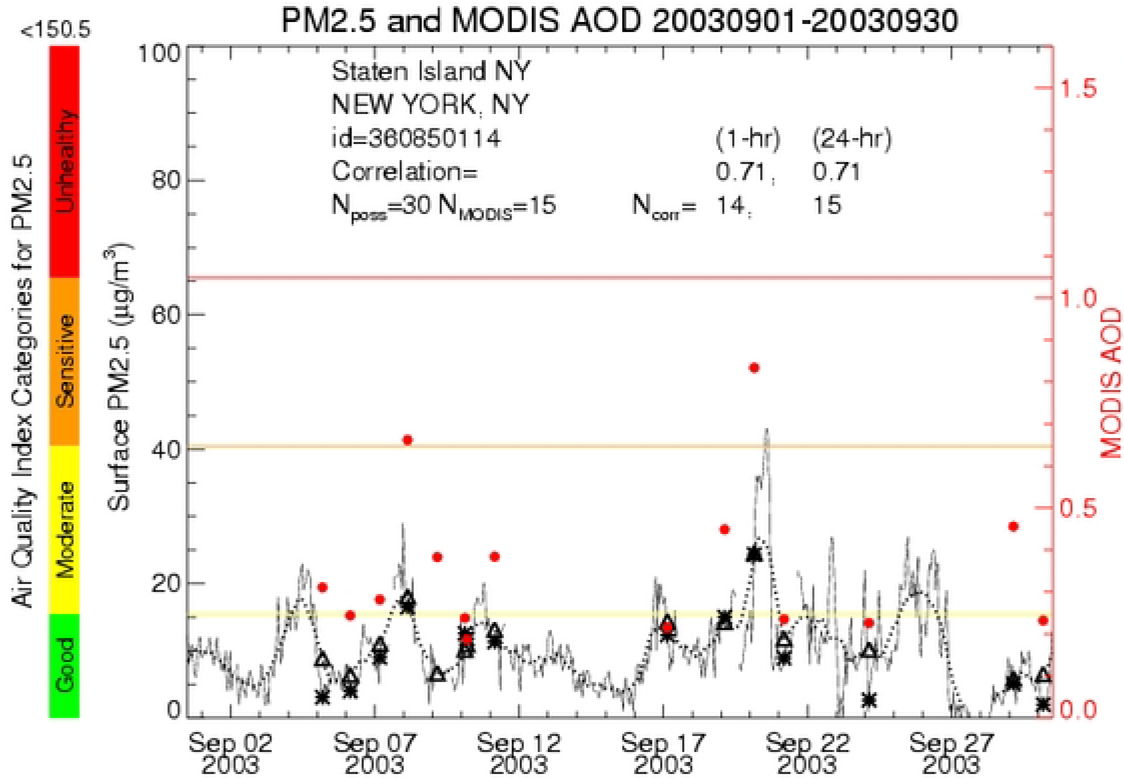

PM2.5 and MODIS AOD 20030901-20030930
<250.5
Air Quality Index Categories for PM2.5
Very Unhealthy
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3) ***EXPANDED RANGE***
MODIS AOD ***EXPANDED RANGE***
NYC NY
NEW YORK, NY
id=360610115 (1-hr) (24-hr)
Correlation= 0.75, 0.79
Nposs=29 NMODIS=13 Ncorr= 12, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 283.000


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Niagara Falls NY
BUFFALO-NIAGARA FALLS, NY
id=360632008
(1-hr)
(24-hr)
Correlation=
0.79,
0.65
N_poss=28 N_MODIS=11
N_corr=
9,
10
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

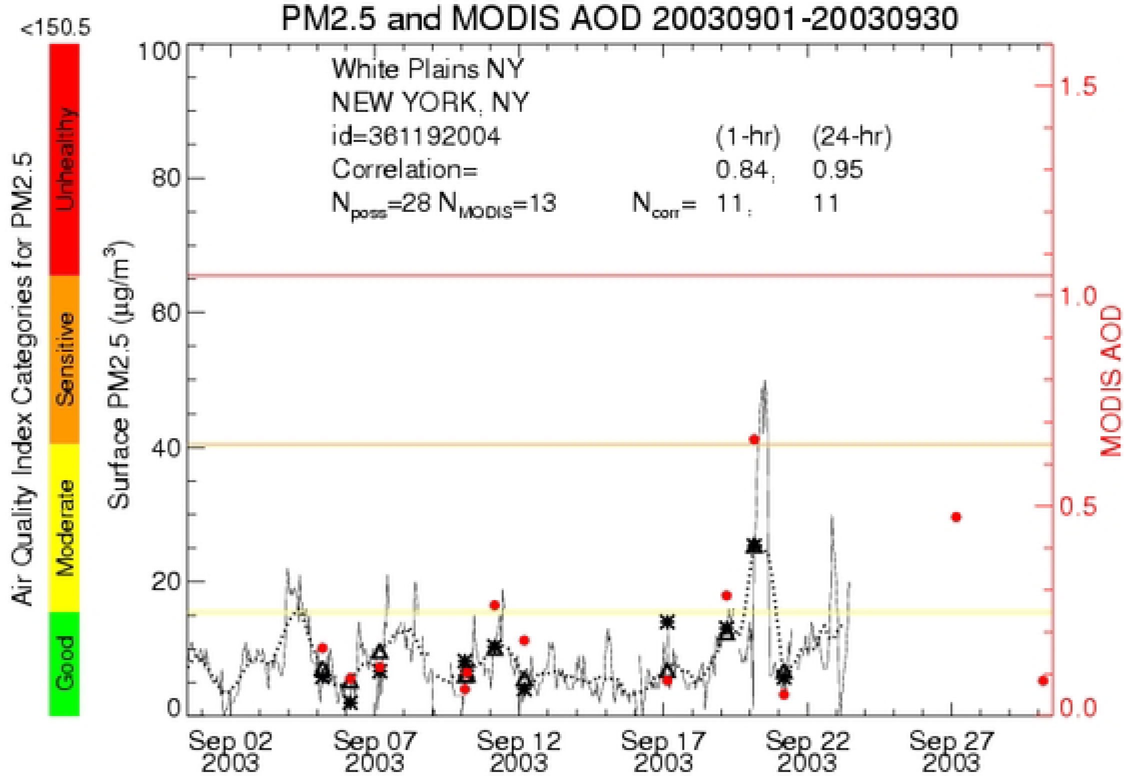

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
UTICA NY
UTICA-ROME, NY
id=360652001
(1-hr)
(24-hr)
Correlation=
0.29,
0.27
N_poss=31 N_MODIS=14
N_corr=
14,
14
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
NBURG NY
NEWBURGH, NY-PA
id=360710002 (1-hr) (24-hr)
Correlation= 0.39, 0.57
Nposs=29 NMODIS=13 Ncorr= 12, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Queens NY
NEW YORK, NY
id=360810124 (1-hr) (24-hr)
Correlation= 0.85, 0.80
Nposs=29 NMODIS=15 Ncorr= 7, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

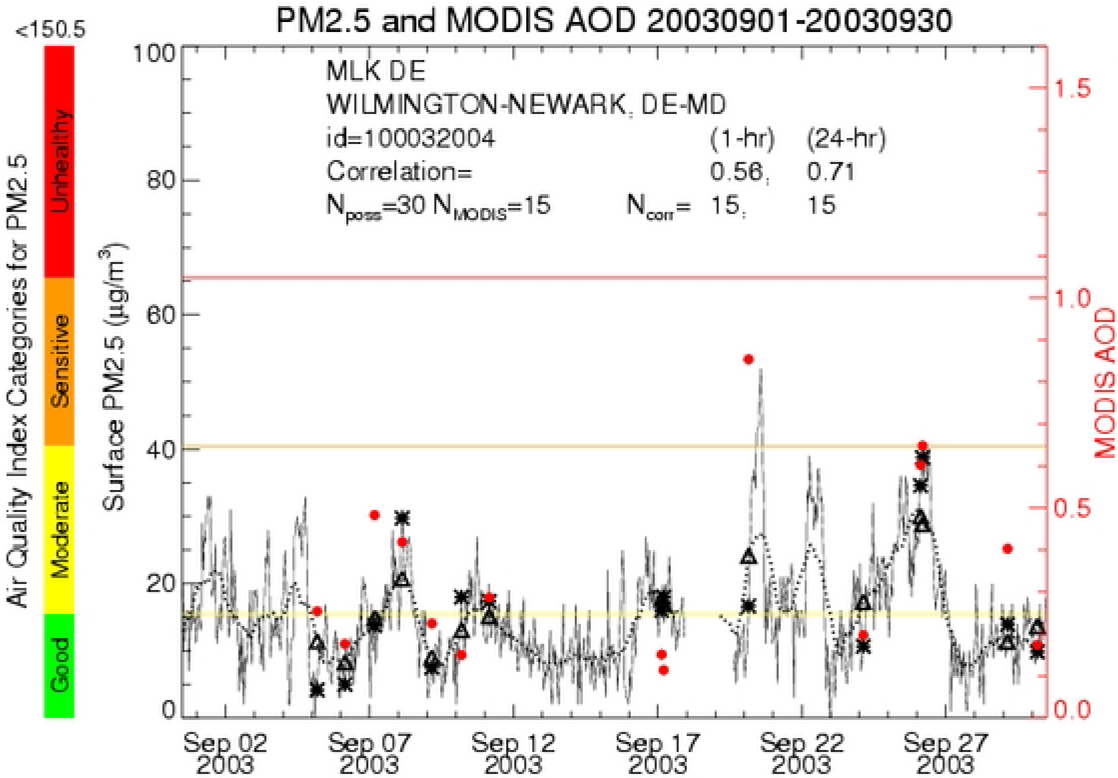


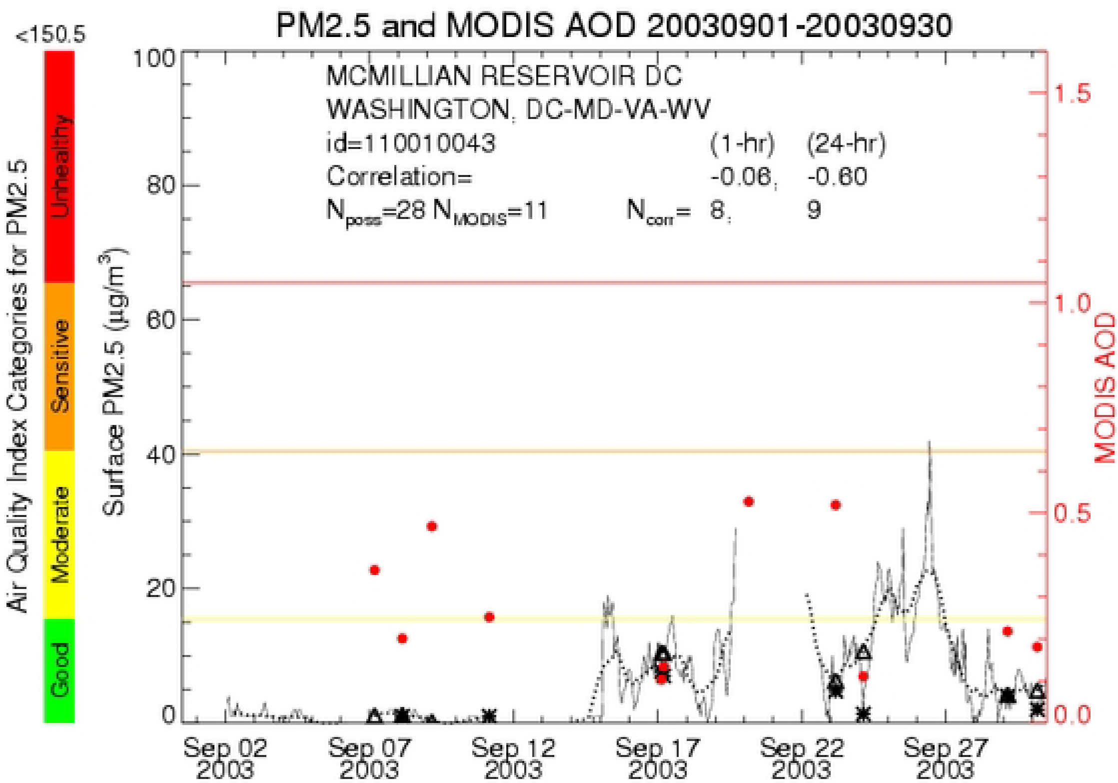
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Staten Island NY
NEW YORK, NY
id=360850114
(1-hr) (24-hr)
Correlation= 0.71; 0.71
Nposs=30 NMODIS=15 Ncorr= 14; 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

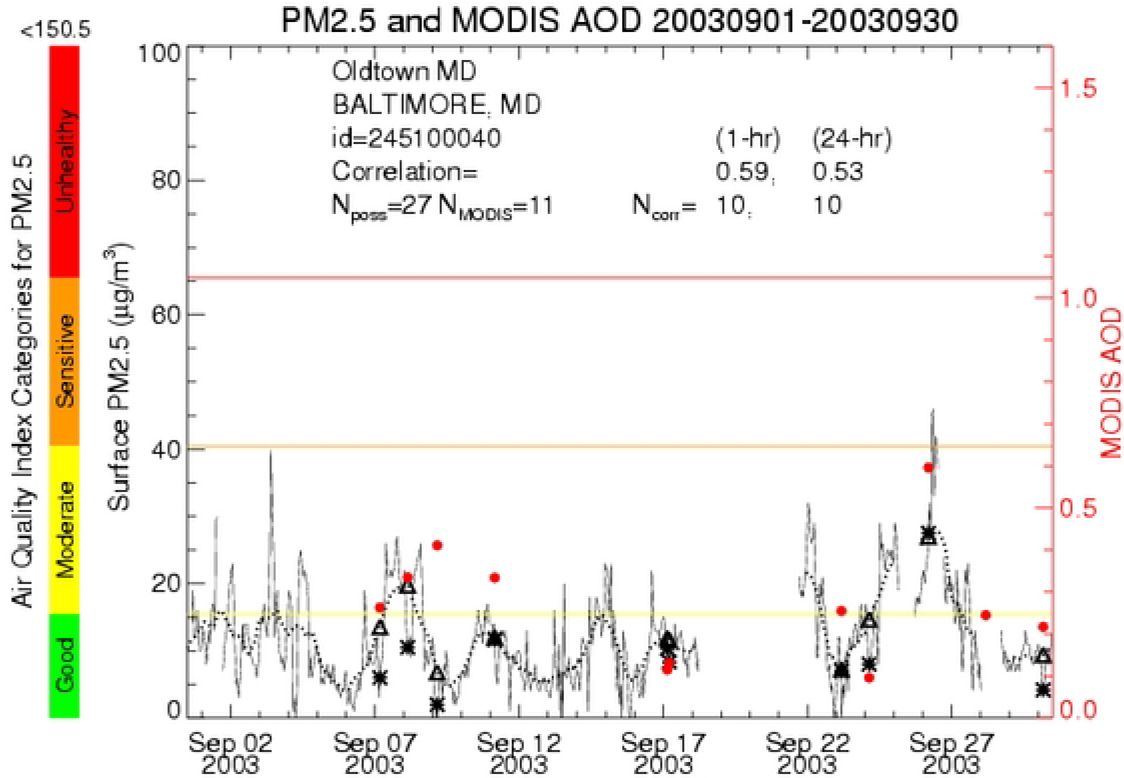


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
White Plains NY
NEW YORK, NY
id=361192004
(1-hr) (24-hr)
Correlation= 0.84; 0.95
Nposs=28 NMODIS=13 Ncorr= 11; 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

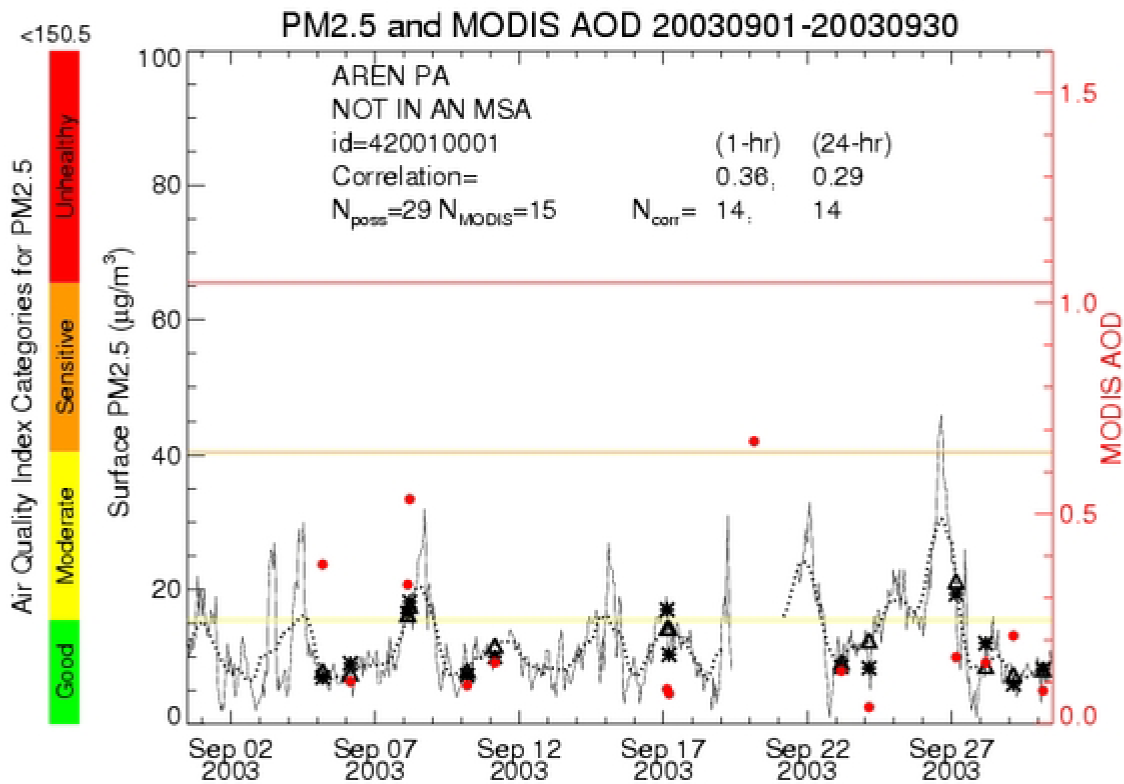
Region 3


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
MLK DE
WILMINGTON-NEWARK, DE-MD
id=100032004 (1-hr) (24-hr)
Correlation= 0.56, 0.71
N_poss=30 N_MODIS=15 N_corr= 15, 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

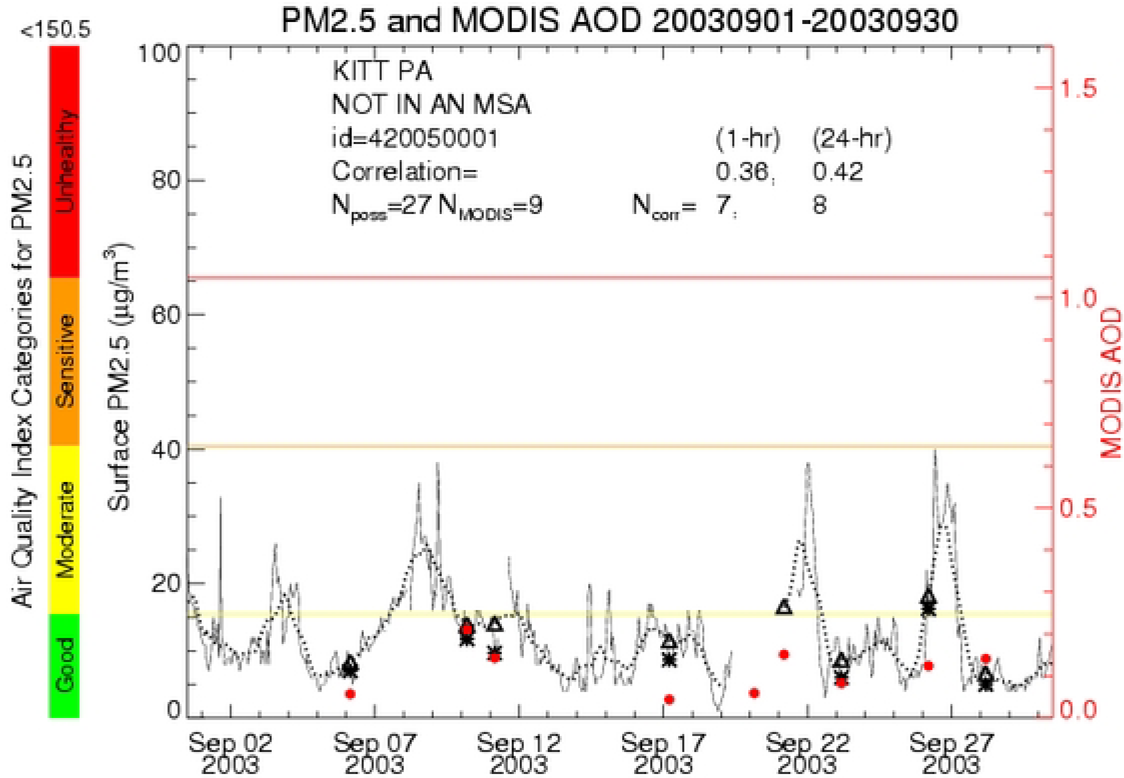

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
MCMILLIAN RESERVOIR DC
WASHINGTON, DC-MD-VA-WV
id=110010043 (1-hr) (24-hr)
Correlation= -0.06, -0.60
N_poss=28 N_MODIS=11 N_corr= 8, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

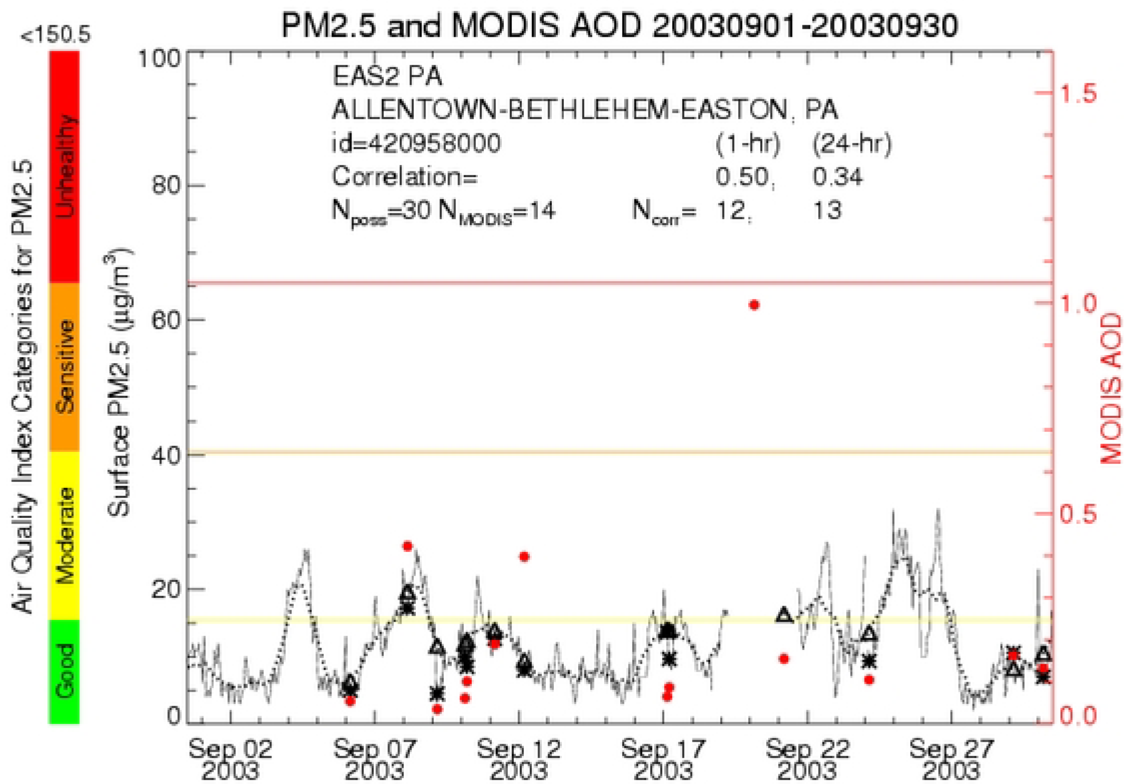


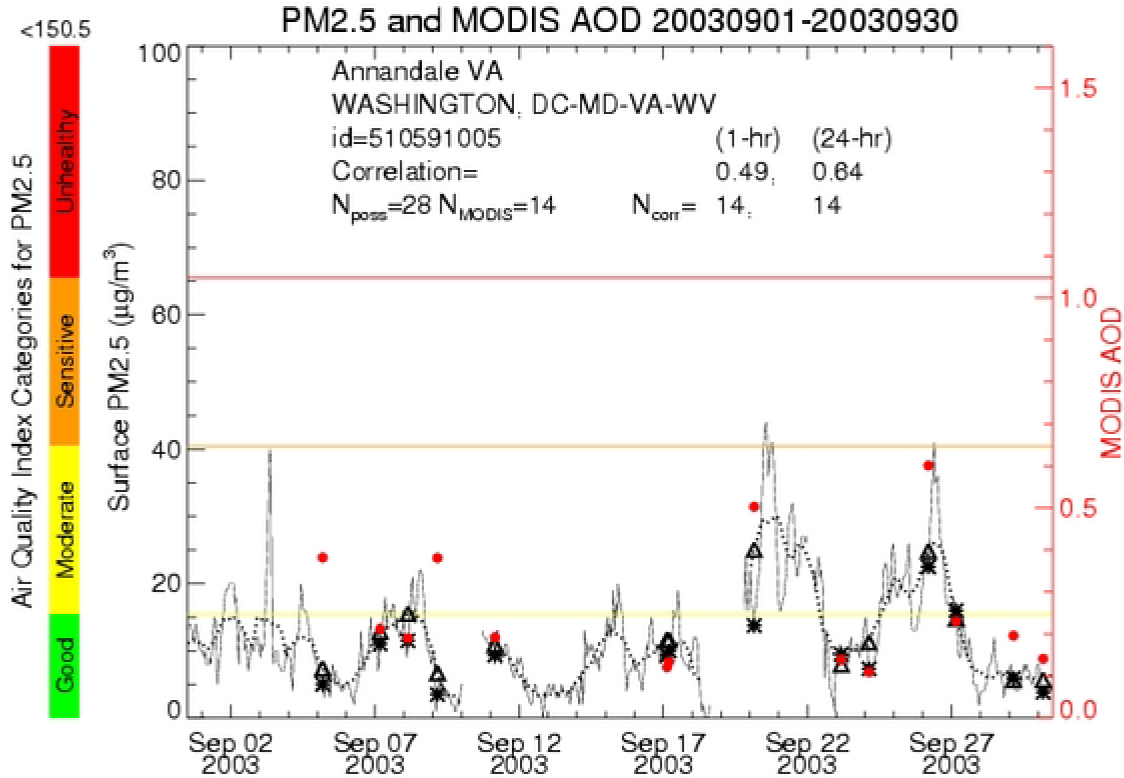
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Oldtown MD
BALTIMORE, MD
id=245100040
(1-hr) (24-hr)
Correlation= 0.59, 0.53
N_poss=27 N_MODIS=11 N_corr= 10, 10
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



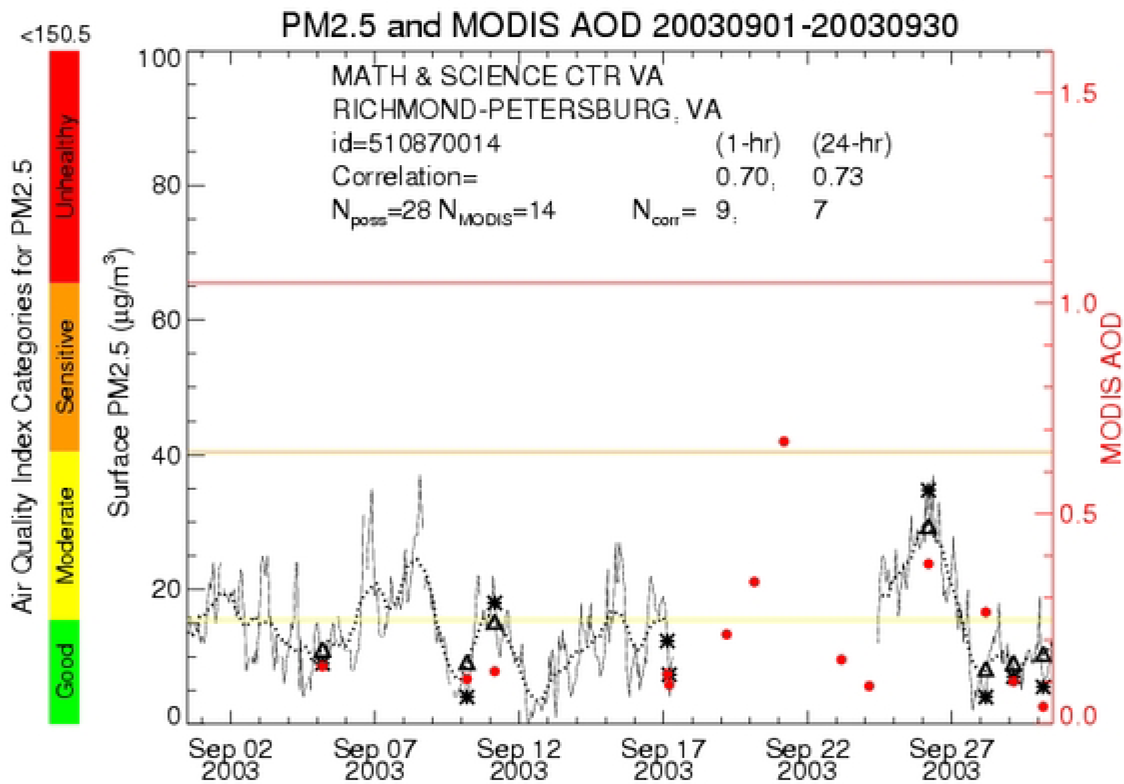
PM2.5 and MODIS AOD 20030901-20030930
<150.5
AREN PA
NOT IN AN MSA
id=420010001
(1-hr) (24-hr)
Correlation= 0.36, 0.29
N_poss=29 N_MODIS=15 N_corr= 14, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
KITT PA
NOT IN AN MSA
id=420050001
(1-hr) (24-hr)
Correlation= 0.36, 0.42
N_poss=27 N_MODIS=9 N_corr= 7, 8
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

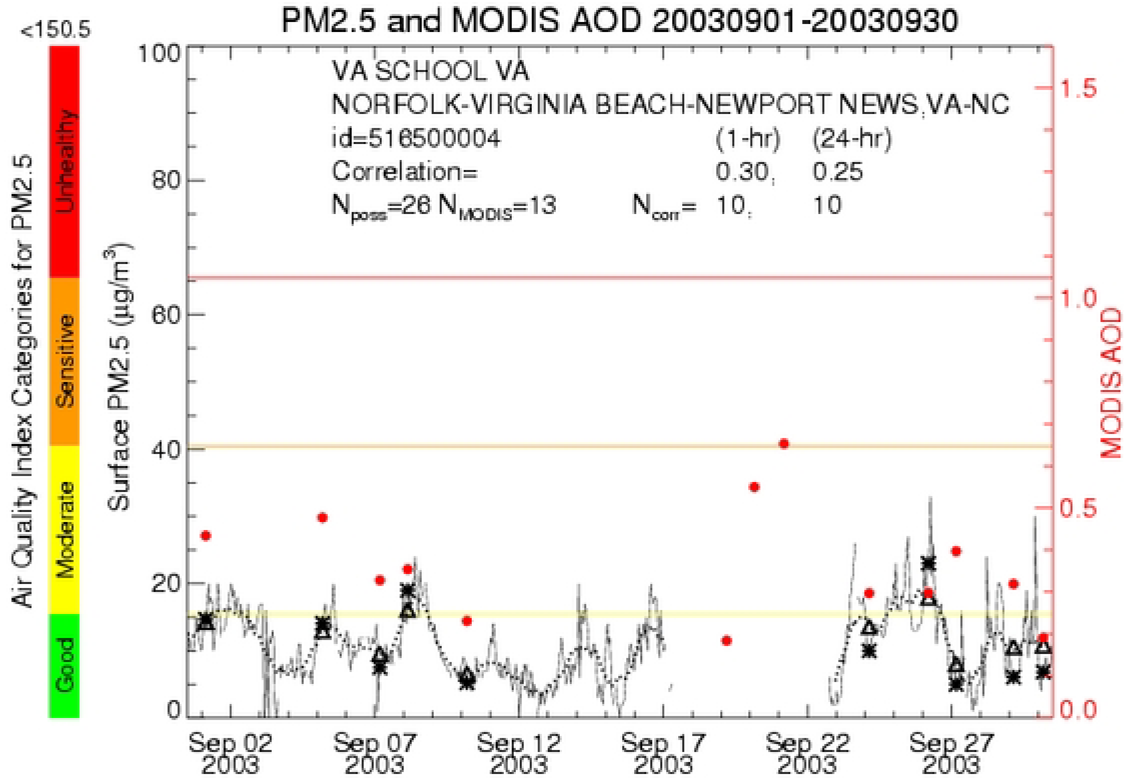

PM2.5 and MODIS AOD 20030901-20030930
EAS2 PA
ALLENTOWN-BETHLEHEM-EASTON, PA
id=420958000
(1-hr) (24-hr)
Correlation= 0.50, 0.34
N_poss=30 N_MODIS=14 N_corr= 12, 13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



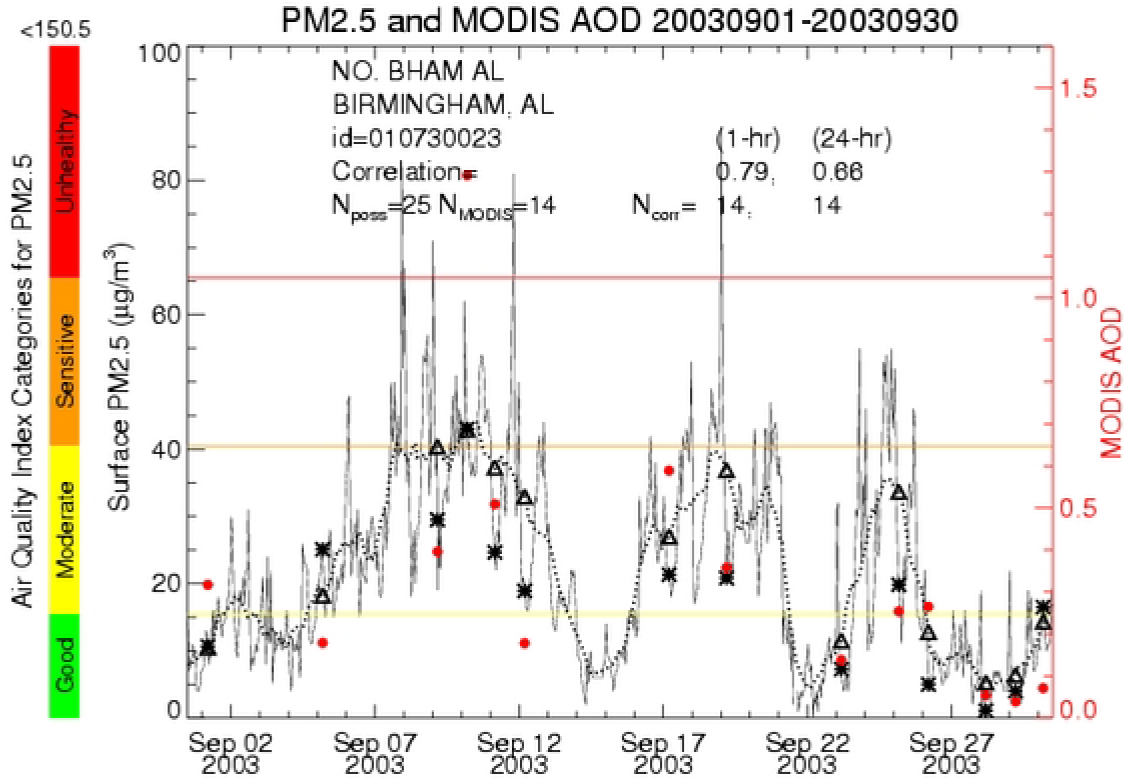
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Annandale VA
WASHINGTON, DC-MD-VA-WV
id=510591005 (1-hr) (24-hr)
Correlation= 0.49, 0.64
Nposs=28 NMODIS=14 Ncorr= 14, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

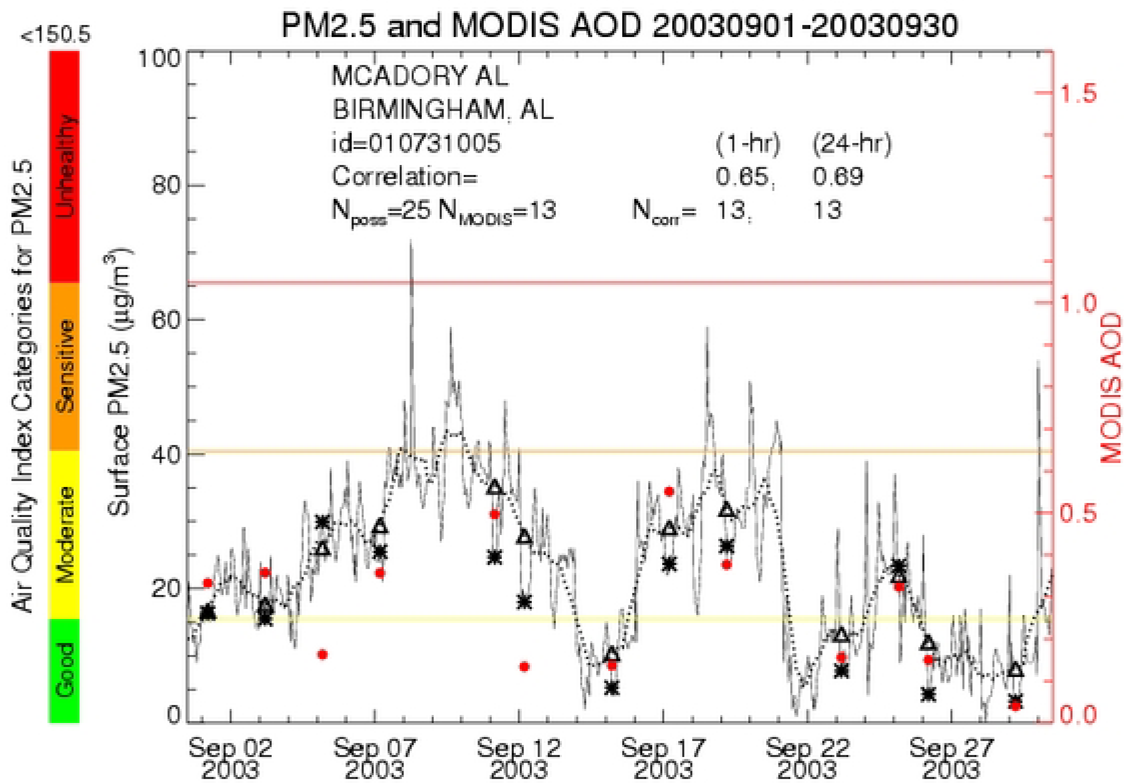


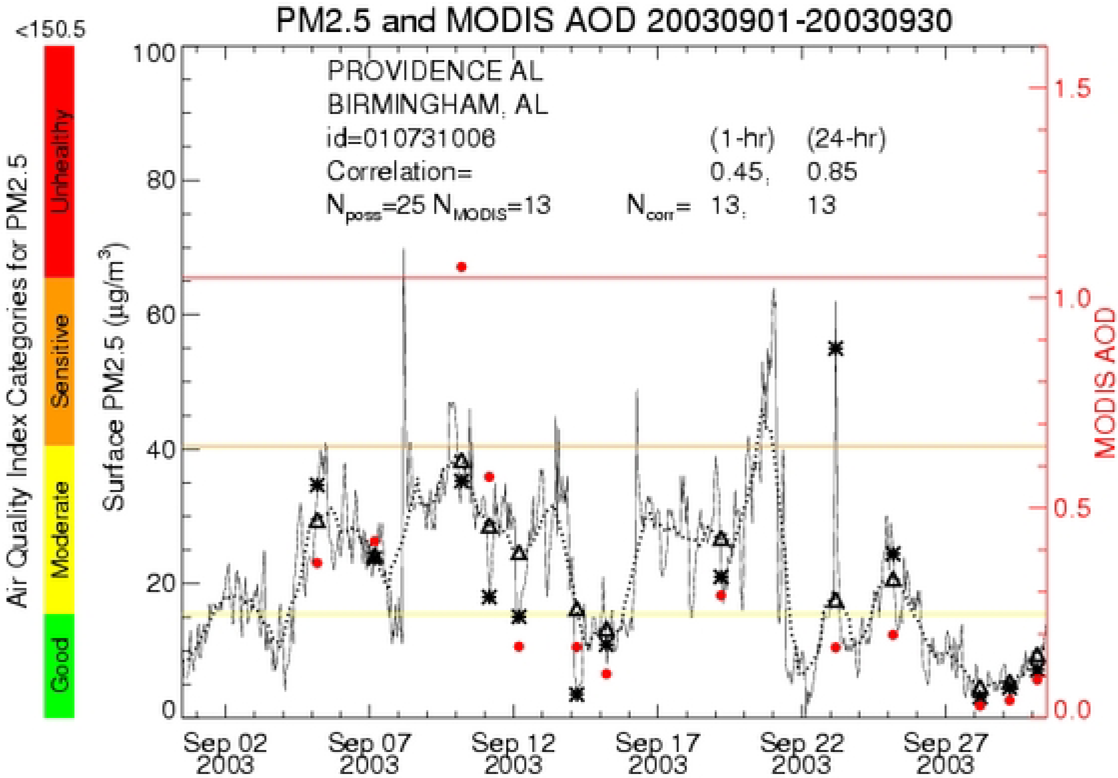
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
MATH & SCIENCE CTR VA
RICHMOND-PETERSBURG, VA
id=510870014 (1-hr) (24-hr)
Correlation= 0.70, 0.73
Nposs=28 NMODIS=14 Ncorr= 9, 7
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

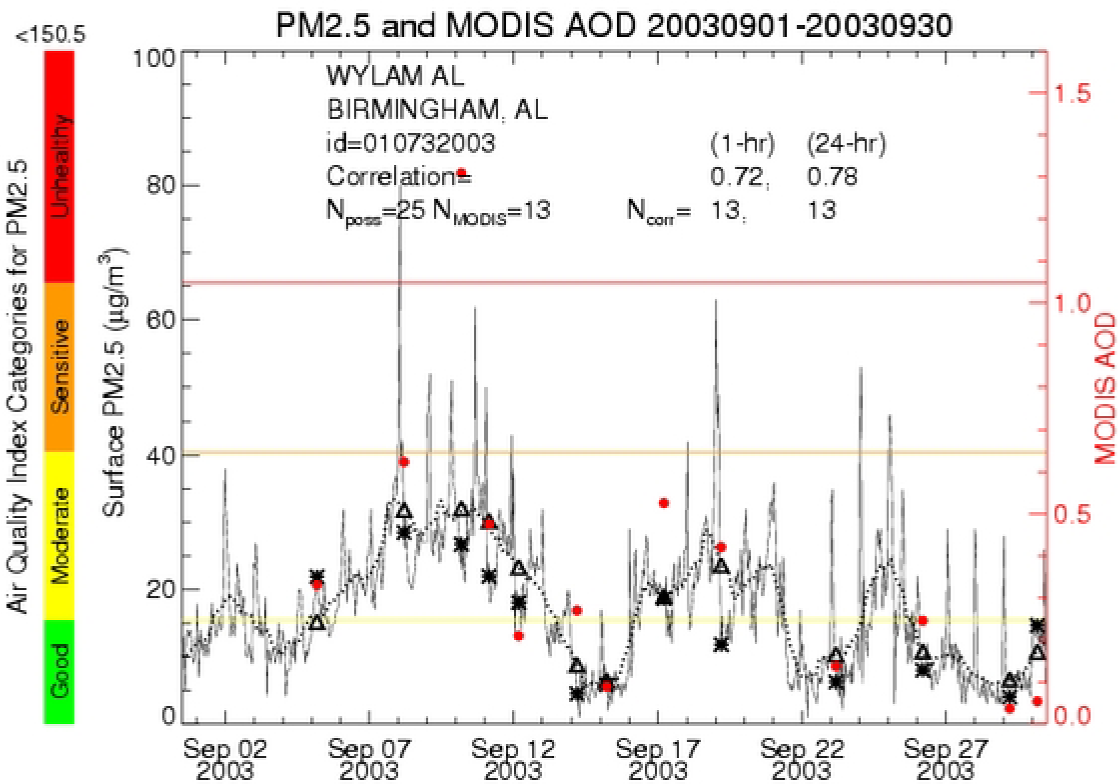

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
VA SCHOOL VA
NORFOLK-VIRGINIA BEACH-NEWPORT NEWS,VA-NC
id=516500004 (1-hr) (24-hr)
Correlation= 0.30, 0.25
N_poss=26 N_MODIS=13 N_corr= 10, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

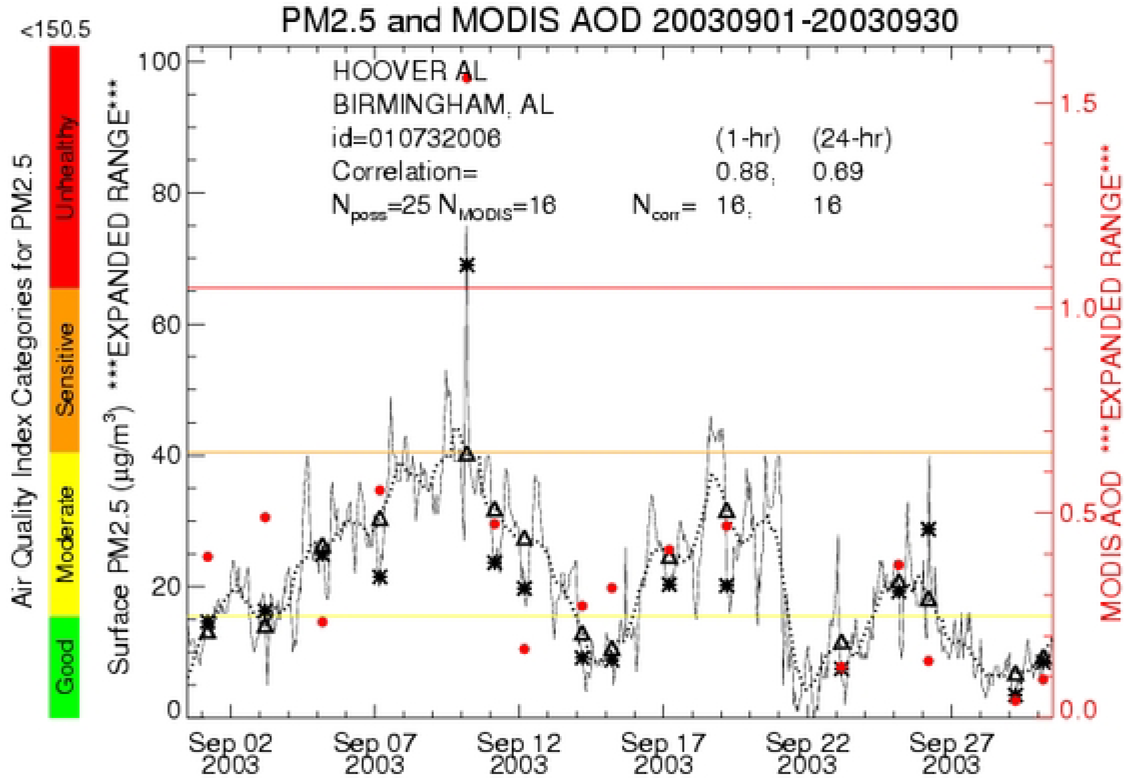
Region 4

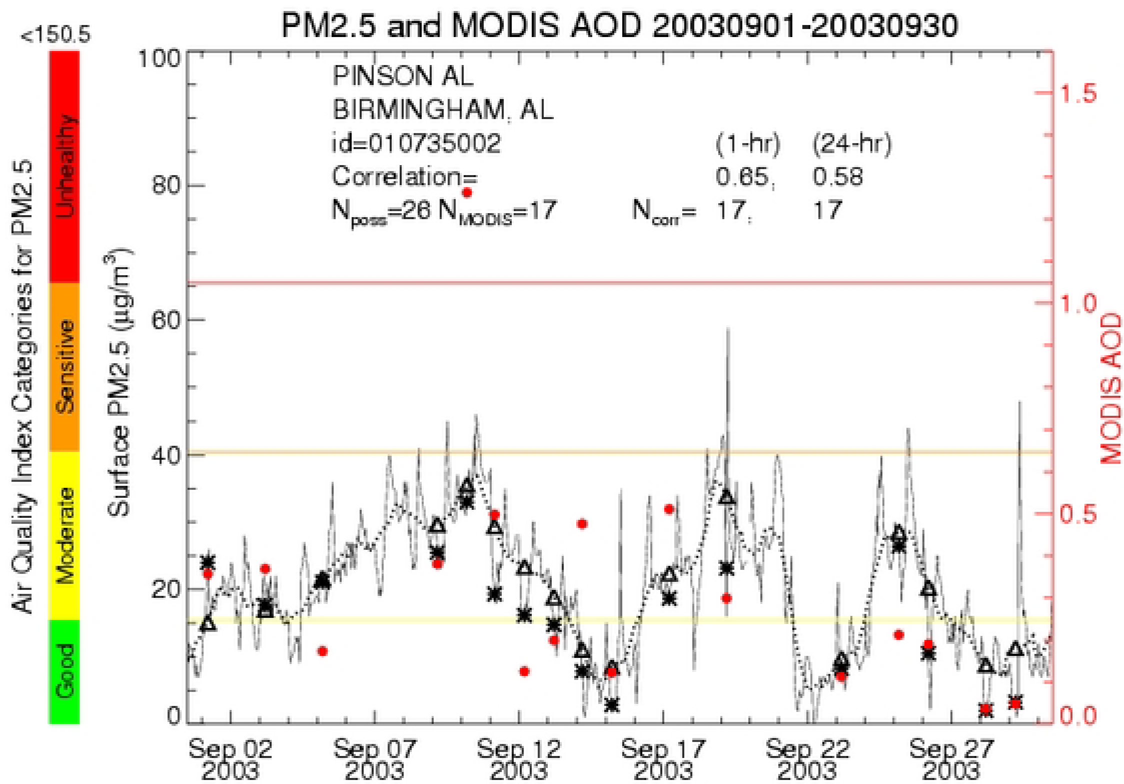

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
NO. BHAM AL
BIRMINGHAM, AL
id=010730023
Correlation=
(1-hr) (24-hr)
0.79, 0.66
Nposs=25 NMODIS=14
Ncorr= 14, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

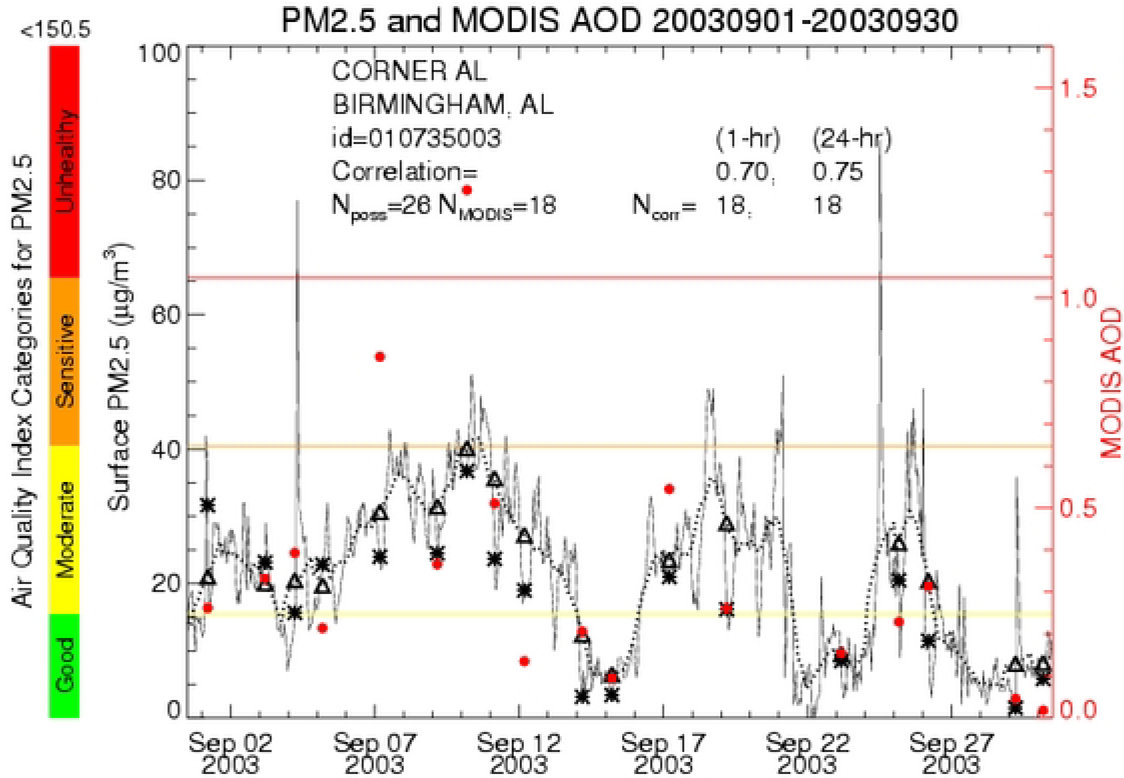

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
MCADORY AL
BIRMINGHAM, AL
id=010731005
Correlation=
(1-hr) (24-hr)
0.65, 0.69
Nposs=25 NMODIS=13
Ncorr= 13, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

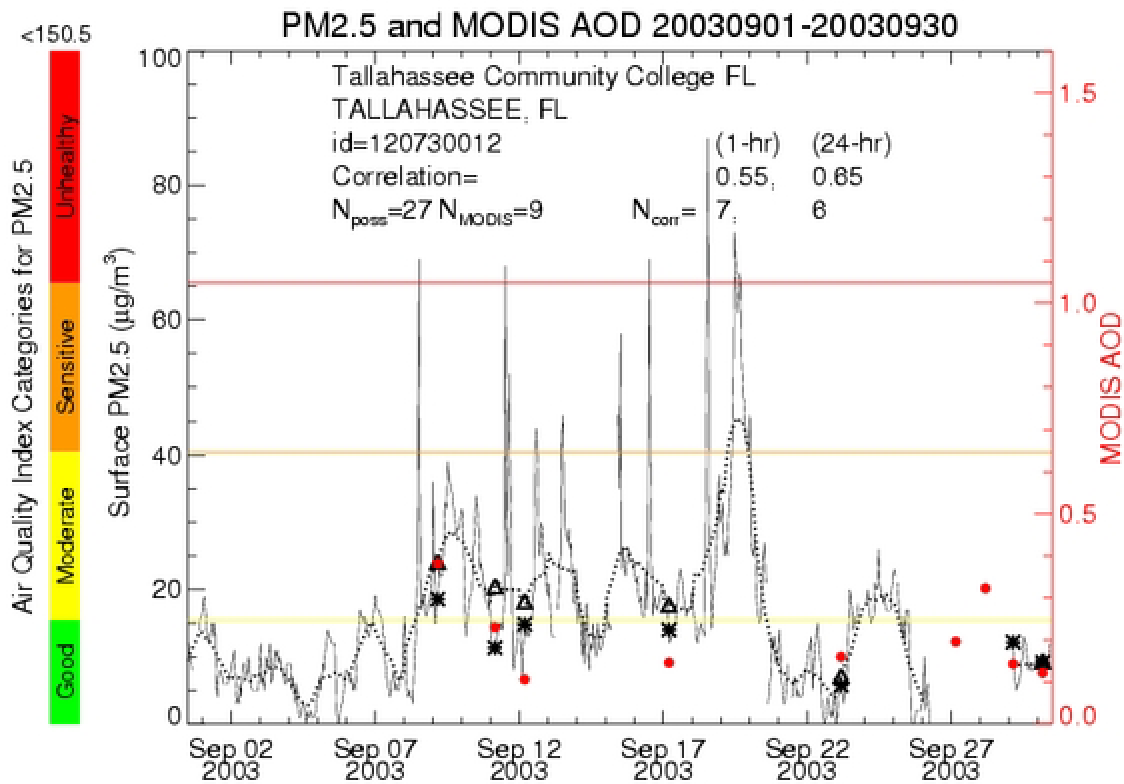

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
PROVIDENCE AL
BIRMINGHAM, AL
id=010731006
Correlation=
Nposs=25 NMODIS=13
(1-hr) (24-hr)
0.45, 0.85
Ncorr= 13, 13
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

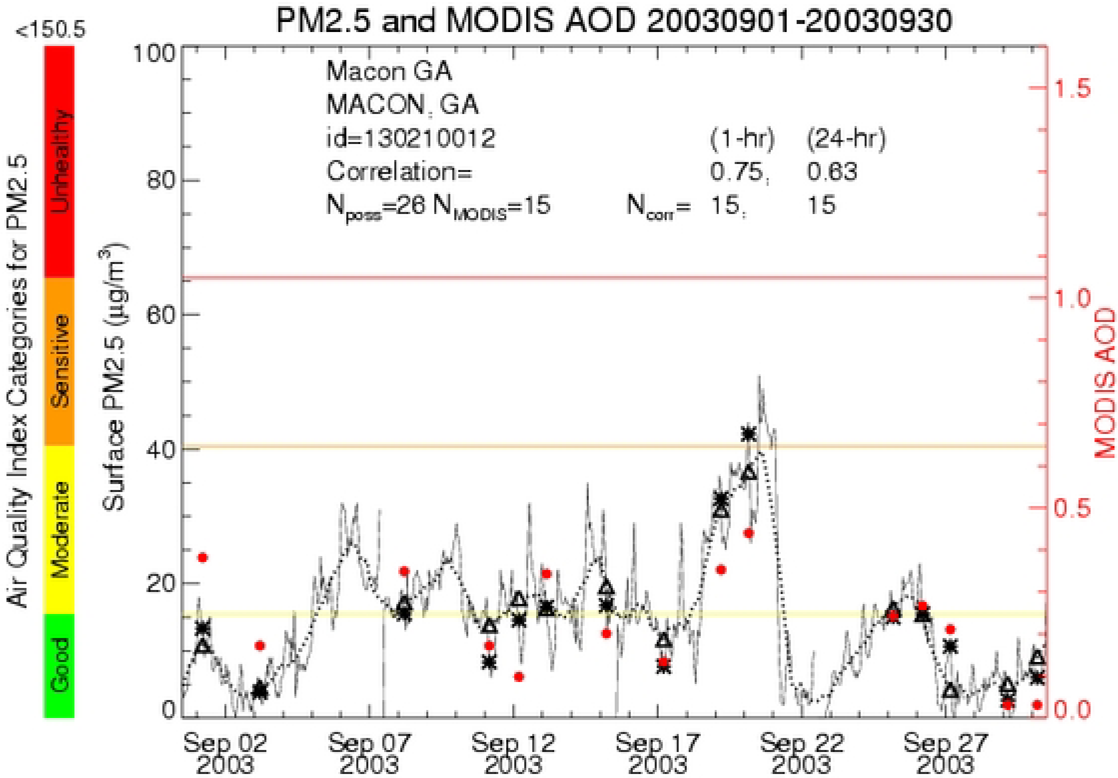

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
WYLAM AL
BIRMINGHAM, AL
id=010732003
Correlation=
Nposs=25 NMODIS=13
(1-hr) (24-hr)
0.72, 0.78
Ncorr= 13, 13
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

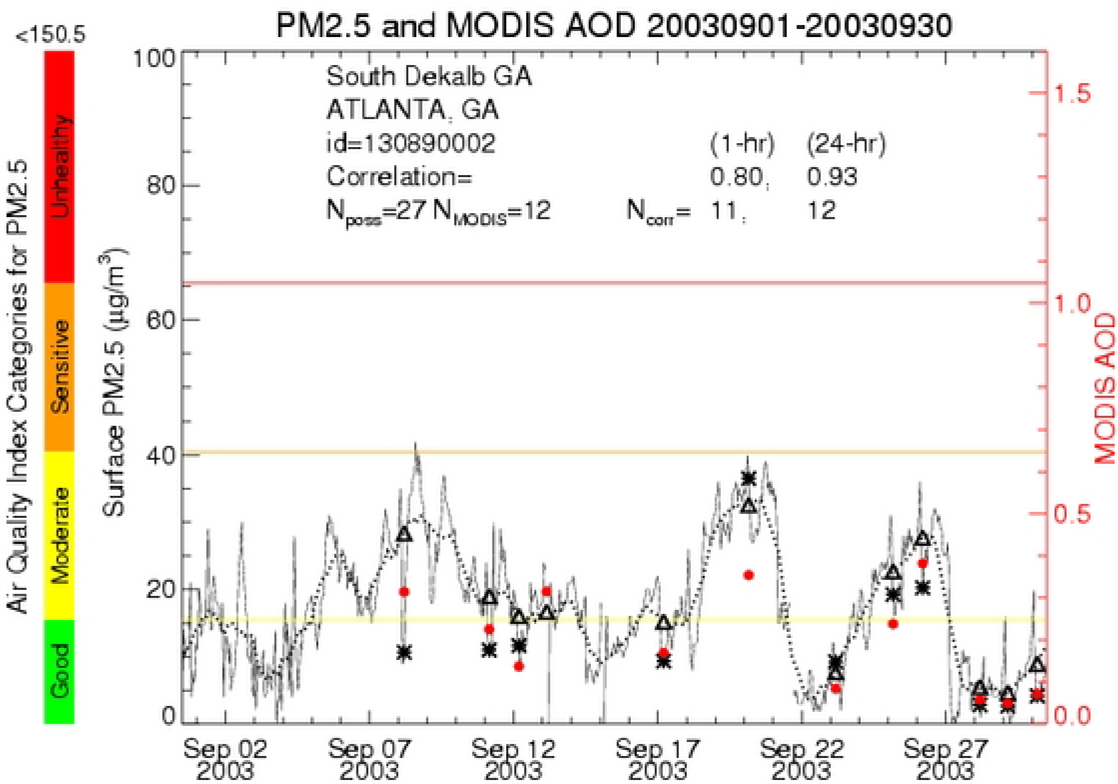

PM2.5 and MODIS AOD 20030901-20030930
<150.5
HOOVER AL
BIRMINGHAM, AL
id=010732006
Correlation=
(1-hr) (24-hr)
0.88, 0.69
N_{poss}=25 N_{MODIS}=16 N_{corr}= 16, 16
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3) ***EXPANDED RANGE***
MODIS AOD ***EXPANDED RANGE***
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

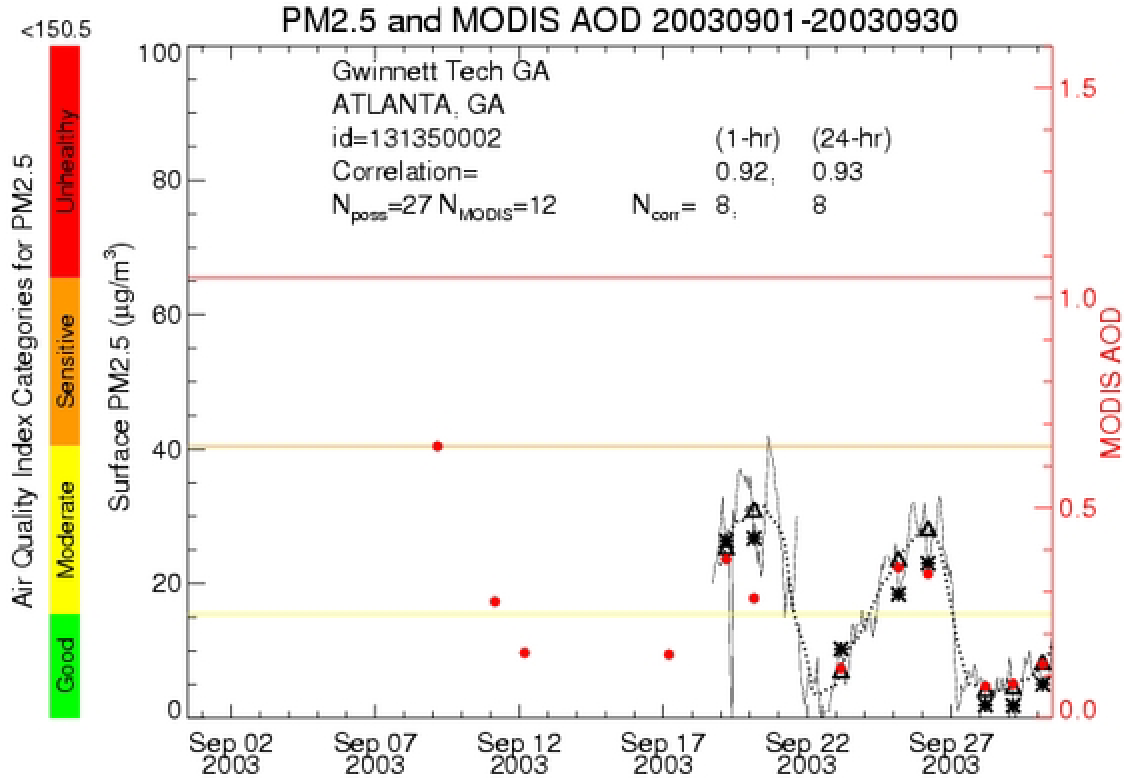

PM2.5 and MODIS AOD 20030901-20030930
<150.5
PINSON AL
BIRMINGHAM, AL
id=010735002
Correlation=
(1-hr) (24-hr)
0.65, 0.58
N_{poss}=26 N_{MODIS}=17 N_{corr}= 17, 17
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

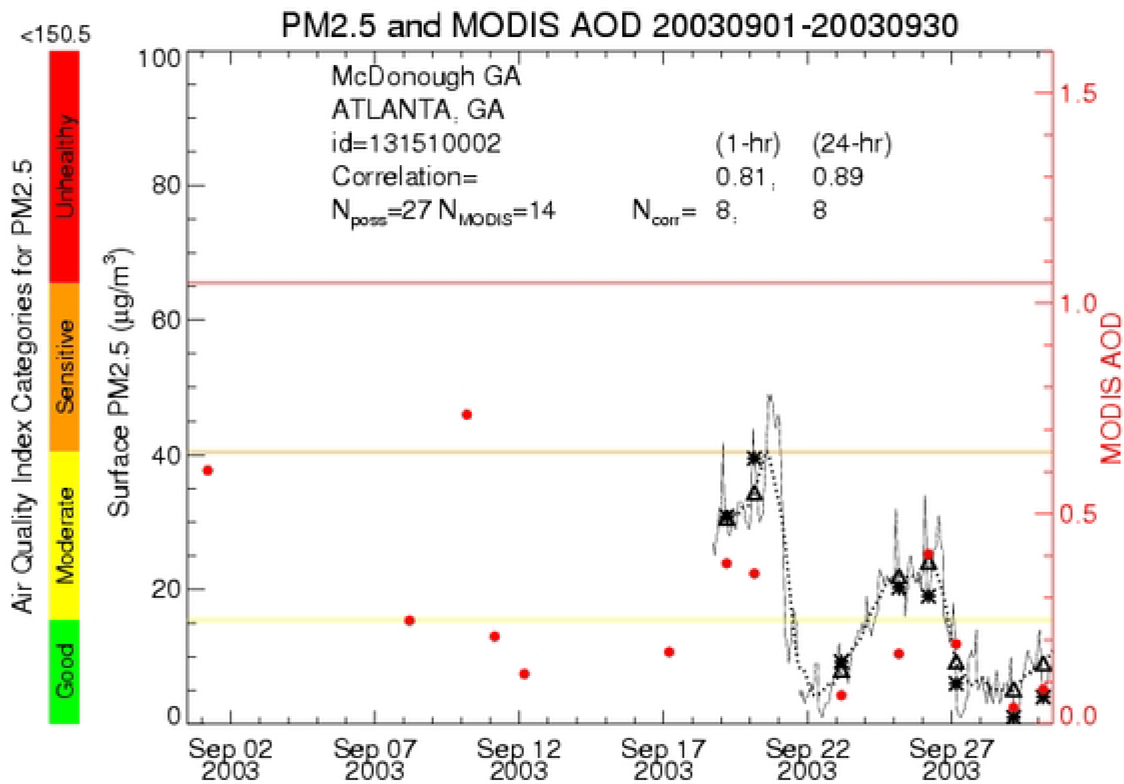

PM2.5 and MODIS AOD 20030901-20030930
CORNER AL
BIRMINGHAM, AL
id=010735003
(1-hr) (24-hr)
Correlation= 0.70, 0.75
N_poss=26 N_MODIS=18 N_corr= 18, 18
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

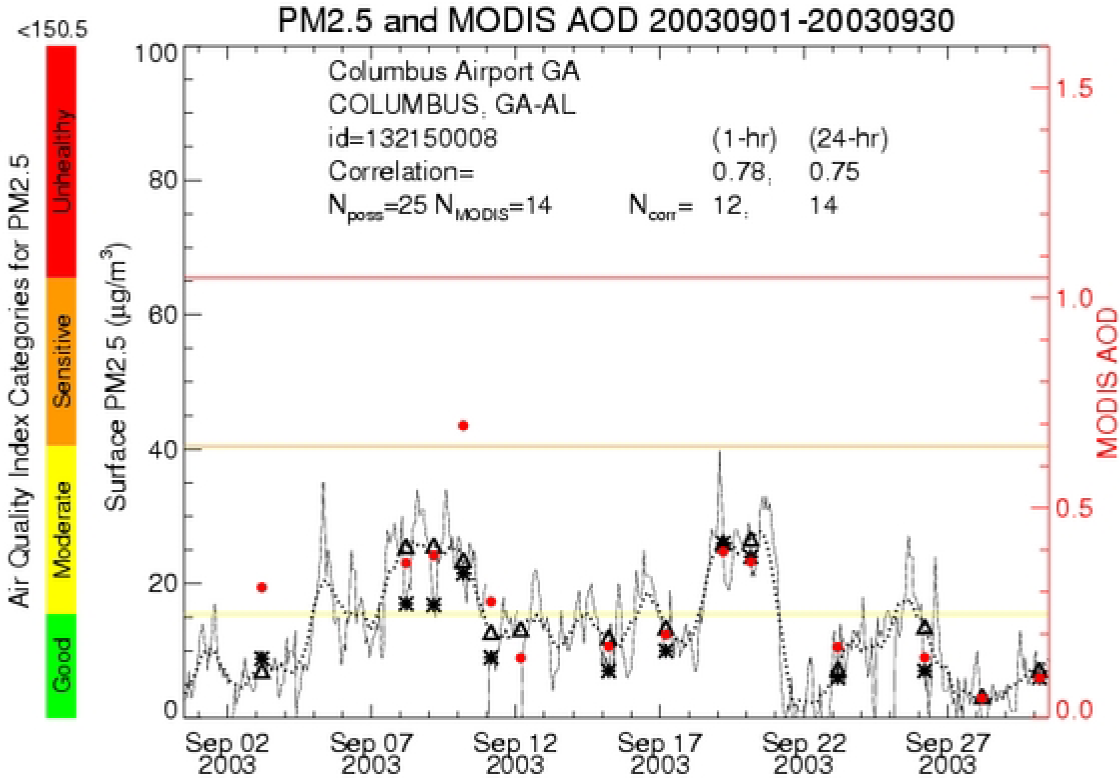

PM2.5 and MODIS AOD 20030901-20030930
Tallahassee Community College FL
TALLAHASSEE, FL
id=120730012
(1-hr) (24-hr)
Correlation= 0.55, 0.65
N_poss=27 N_MODIS=9 N_corr= 7, 6
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Macon GA
MACON, GA
id=130210012 (1-hr) (24-hr)
Correlation= 0.75; 0.63
Nposs=26 NMODIS=15 Ncorr= 15; 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

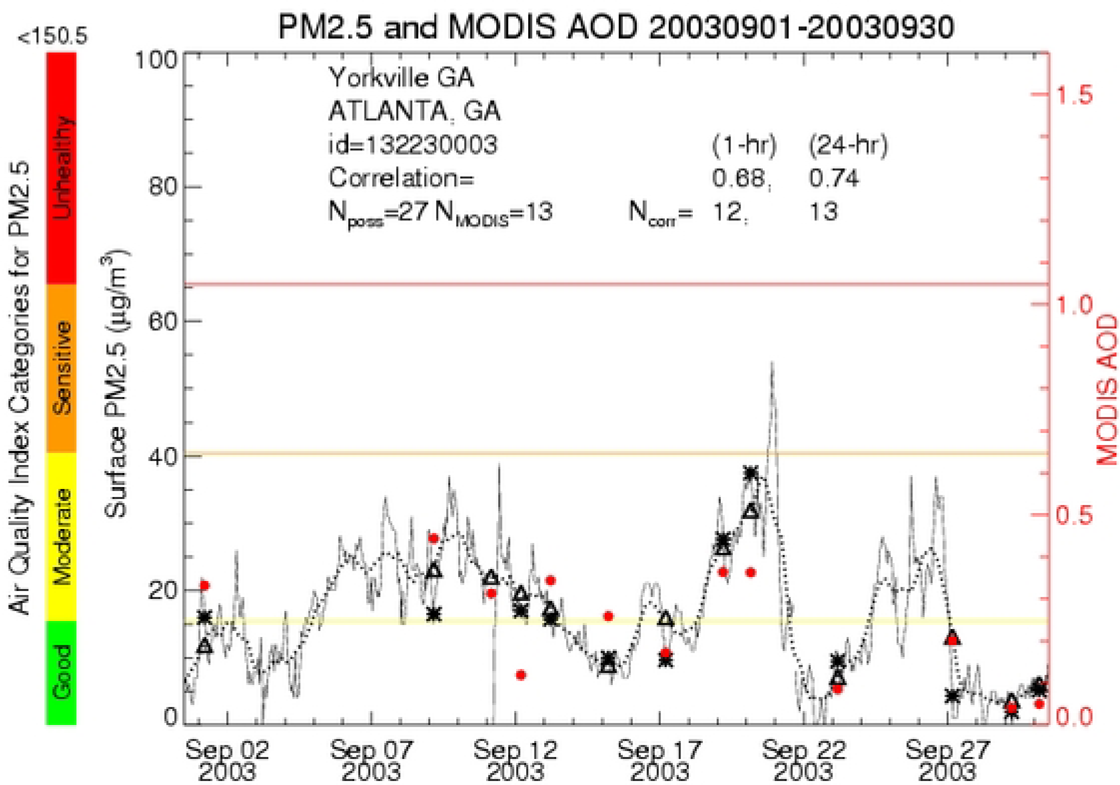

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
South Dekalb GA
ATLANTA, GA
id=130890002 (1-hr) (24-hr)
Correlation= 0.80; 0.93
Nposs=27 NMODIS=12 Ncorr= 11; 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Gwinnett Tech GA
ATLANTA, GA
id=131350002
Correlation=
(1-hr) (24-hr)
0.92, 0.93
Nposs=27 NMODIS=12 Ncorr= 8, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

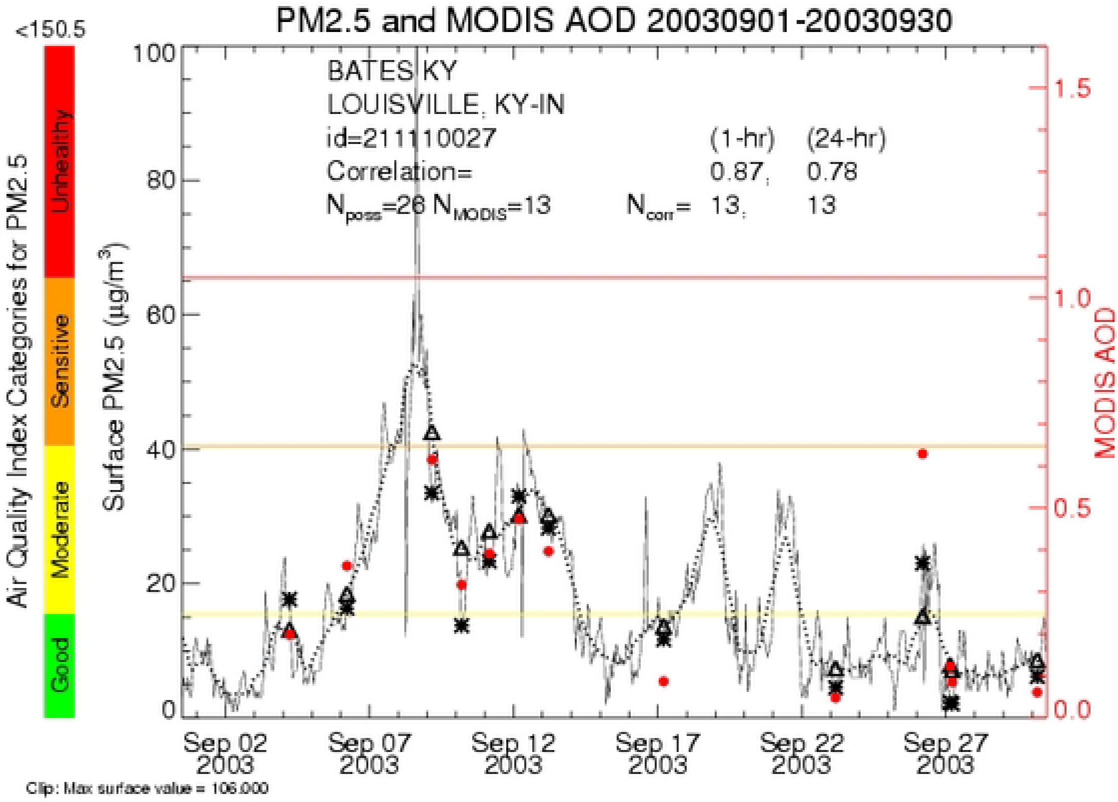

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
McDonough GA
ATLANTA, GA
id=131510002
Correlation=
(1-hr) (24-hr)
0.81, 0.89
Nposs=27 NMODIS=14 Ncorr= 8, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



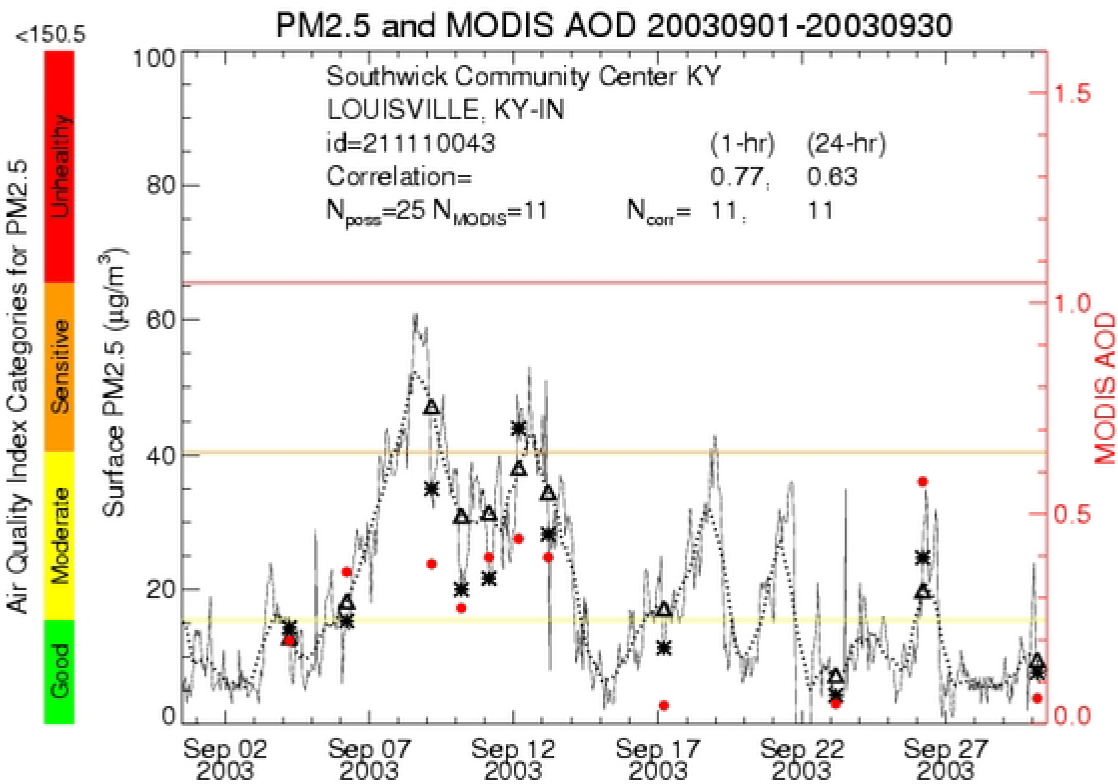
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Columbus Airport GA
COLUMBUS, GA-AL
id=132150008
(1-hr) (24-hr)
Correlation= 0.78, 0.75
Nposs=25 NMODIS=14 Ncorr= 12, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



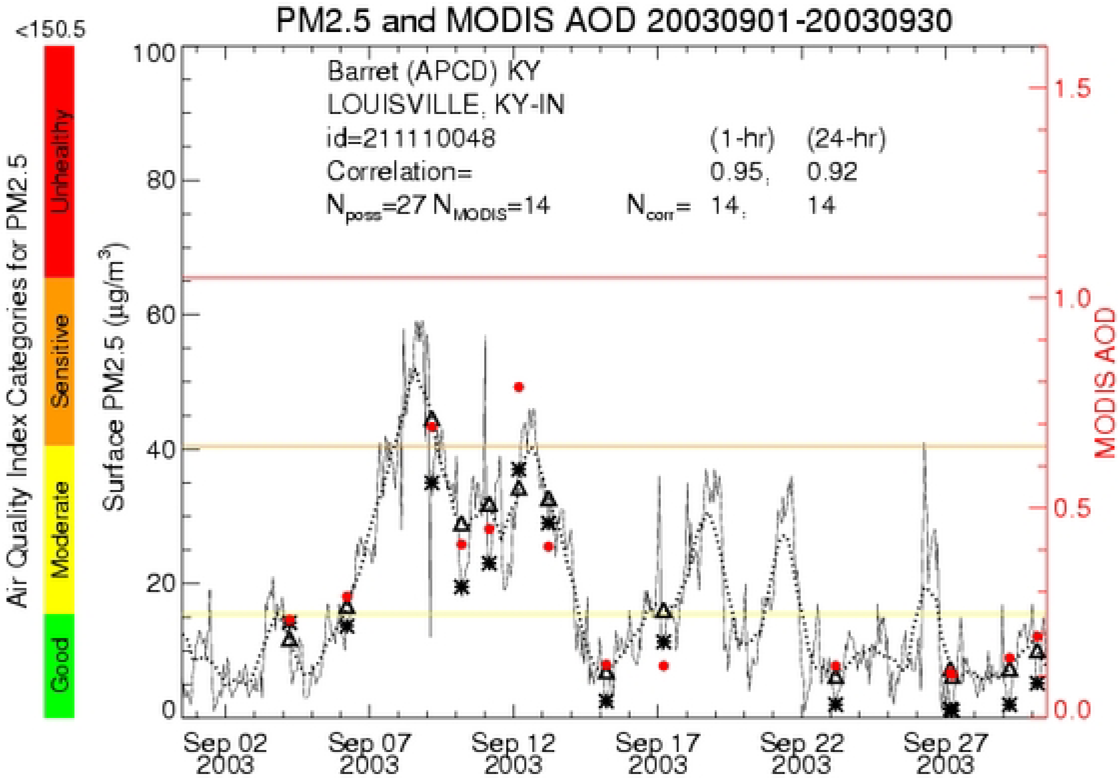
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Yorkville GA
ATLANTA, GA
id=132230003
(1-hr) (24-hr)
Correlation= 0.68, 0.74
Nposs=27 NMODIS=13 Ncorr= 12, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

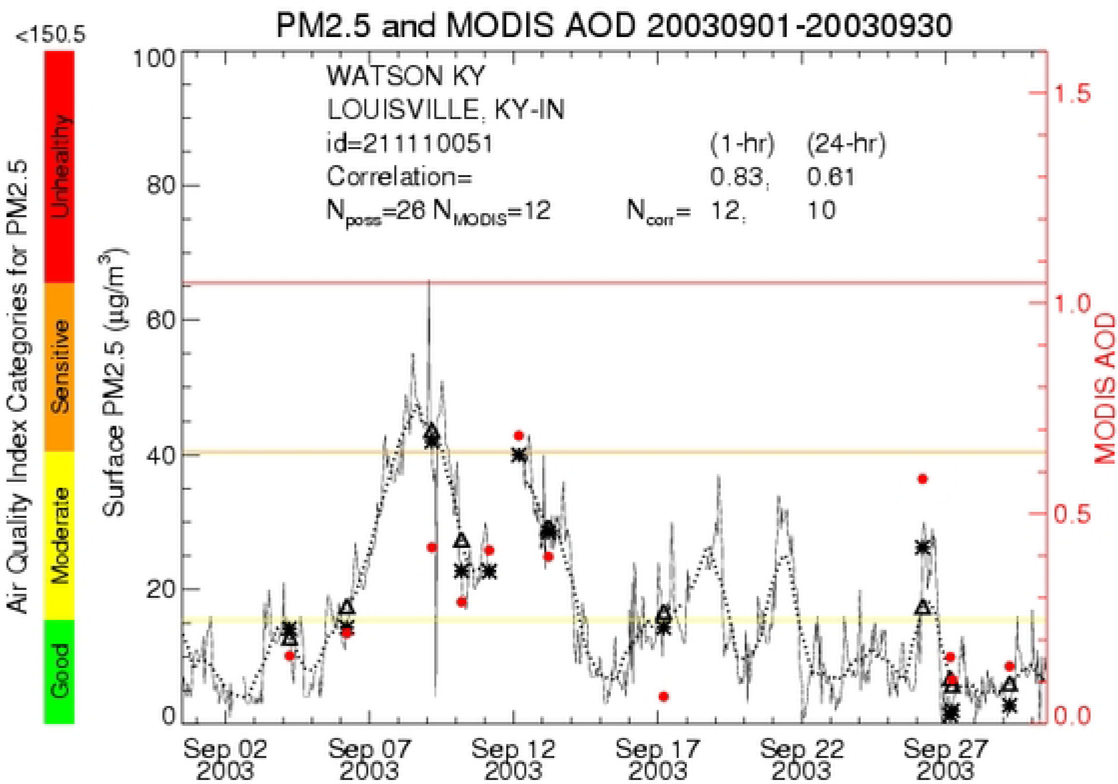


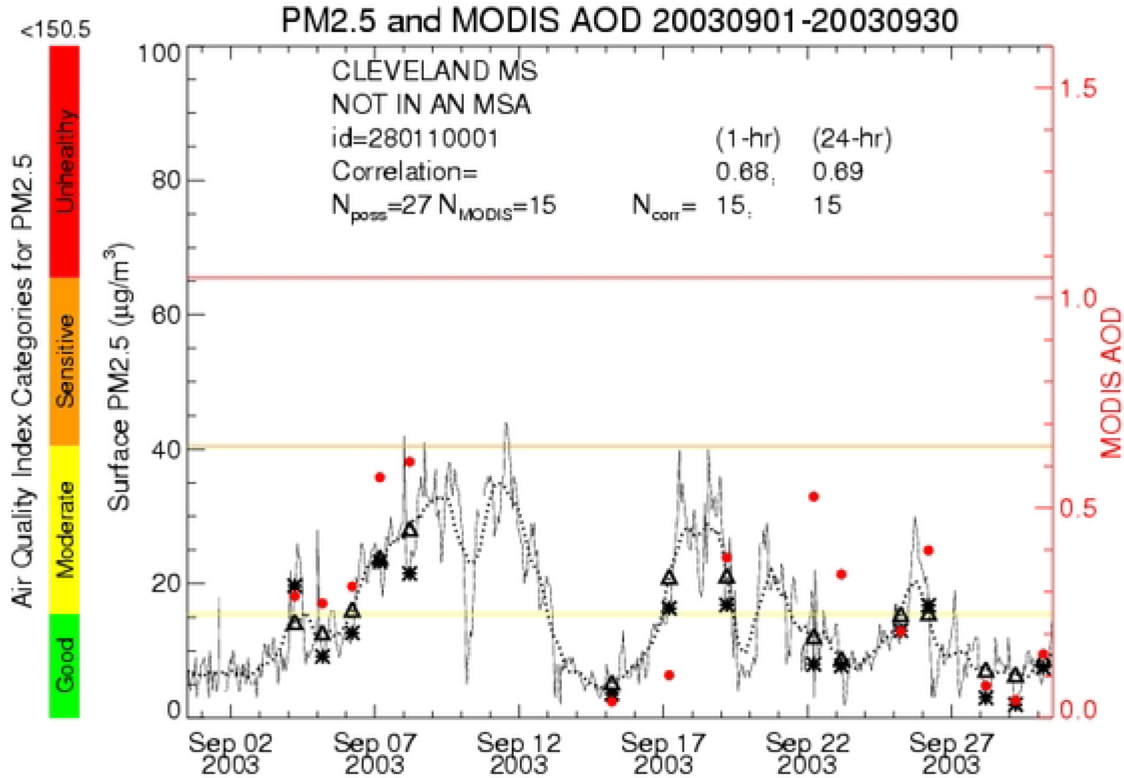
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
BATES KY
LOUISVILLE, KY-IN
id=211110027
(1-hr) (24-hr)
Correlation= 0.87; 0.78
Nposs=26 NMODIS=13 Ncorr= 13; 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 106.000

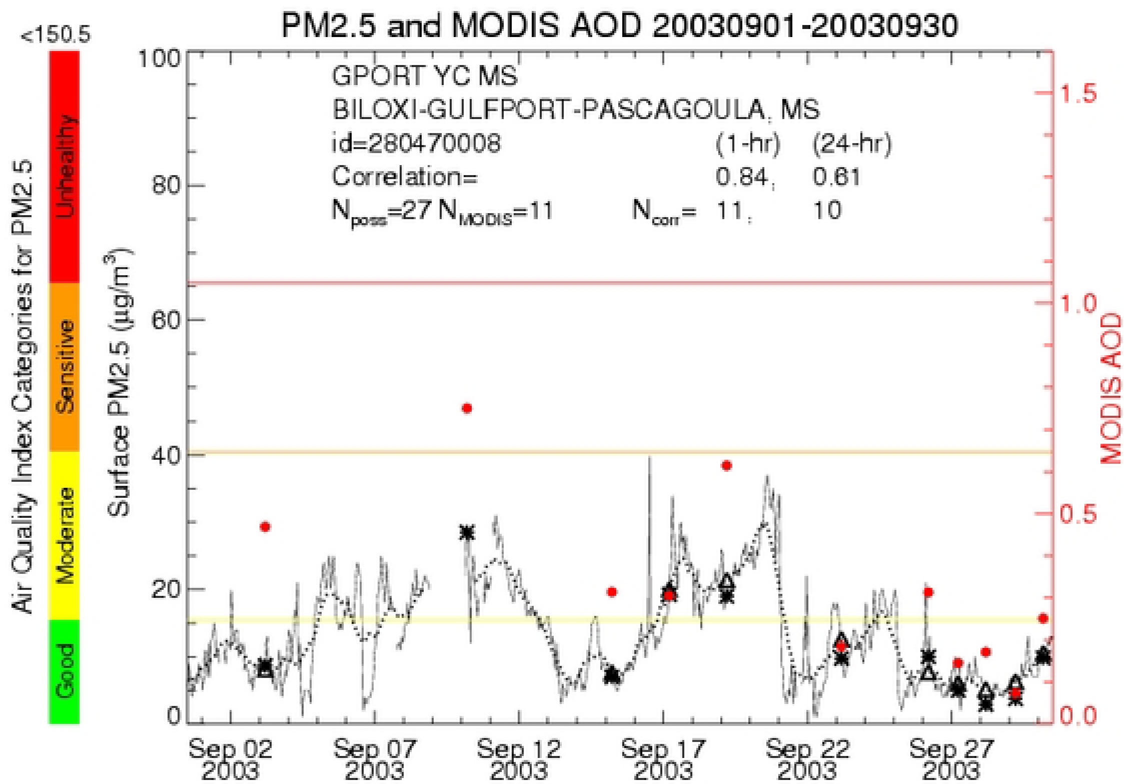


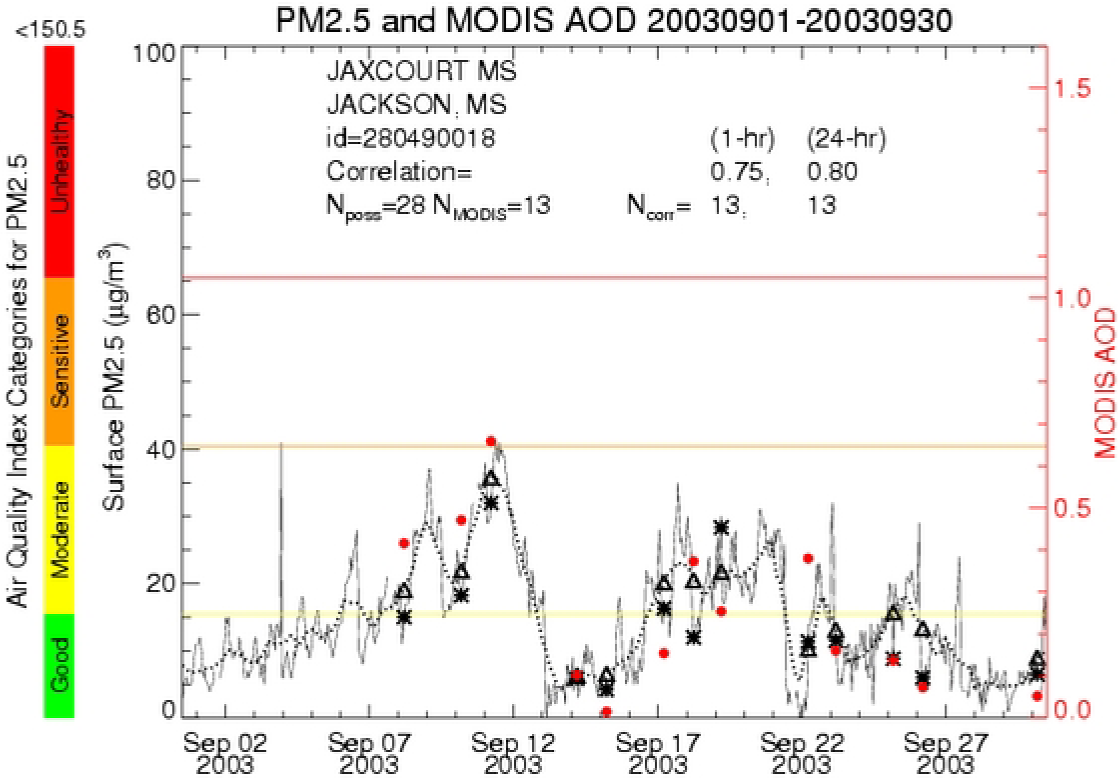
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Southwick Community Center KY
LOUISVILLE, KY-IN
id=211110043
(1-hr) (24-hr)
Correlation= 0.77; 0.63
Nposs=25 NMODIS=11 Ncorr= 11; 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

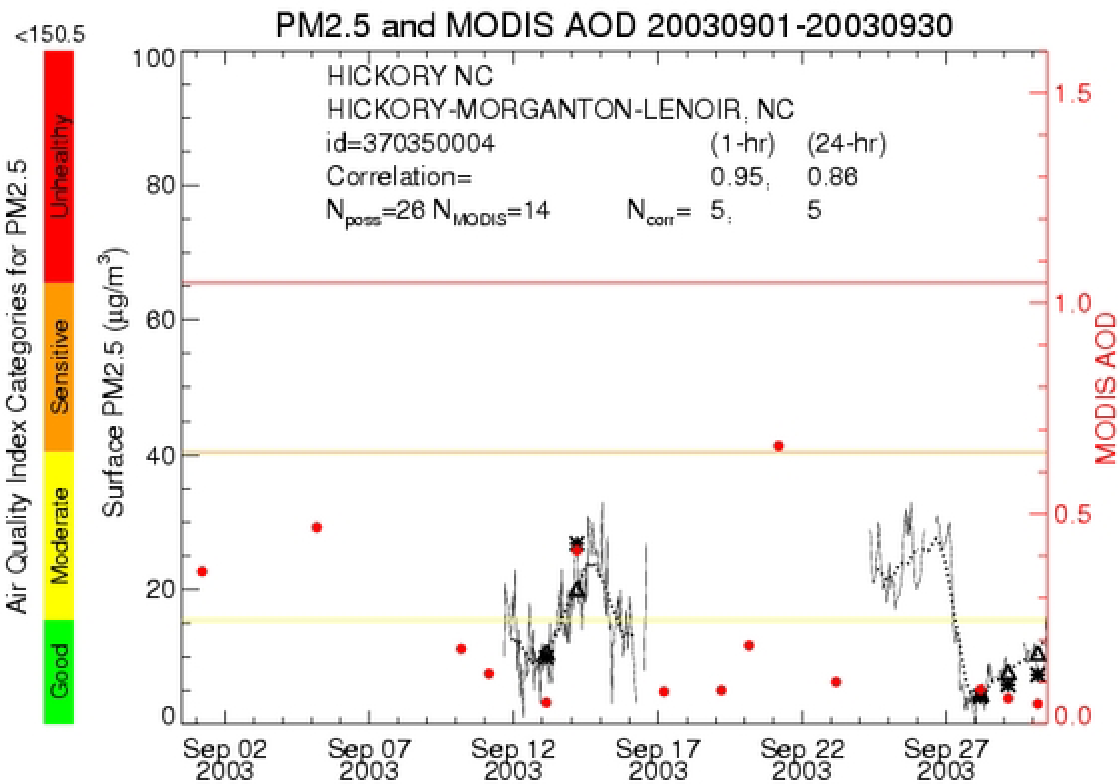

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Barret (APCD) KY
LOUISVILLE, KY-IN
id=211110048
(1-hr) (24-hr)
Correlation= 0.95, 0.92
Nposs=27 NMODIS=14 Ncorr= 14, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

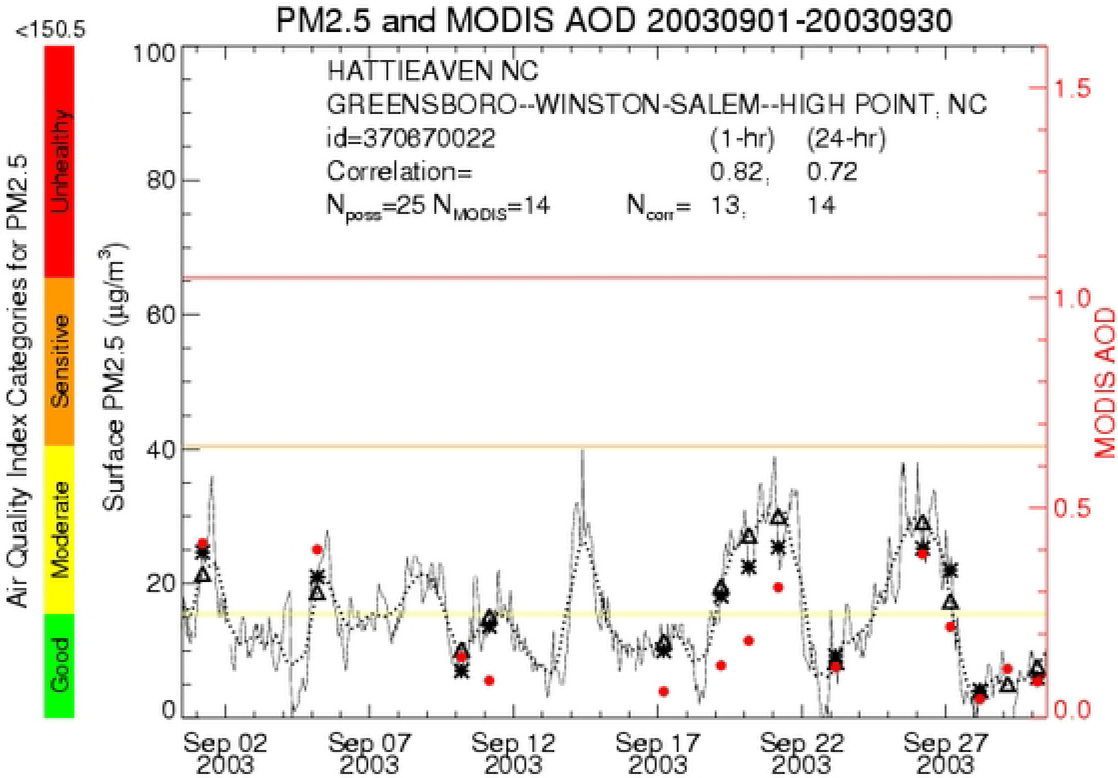

PM2.5 and MODIS AOD 20030901-20030930
<150.5
WATSON KY
LOUISVILLE, KY-IN
id=211110051
(1-hr) (24-hr)
Correlation= 0.83, 0.61
Nposs=26 NMODIS=12 Ncorr= 12, 10
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
CLEVELAND MS
NOT IN AN MSA
id=280110001 (1-hr) (24-hr)
Correlation= 0.68, 0.69
N_poss=27 N_MODIS=15 N_corr= 15, 15
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

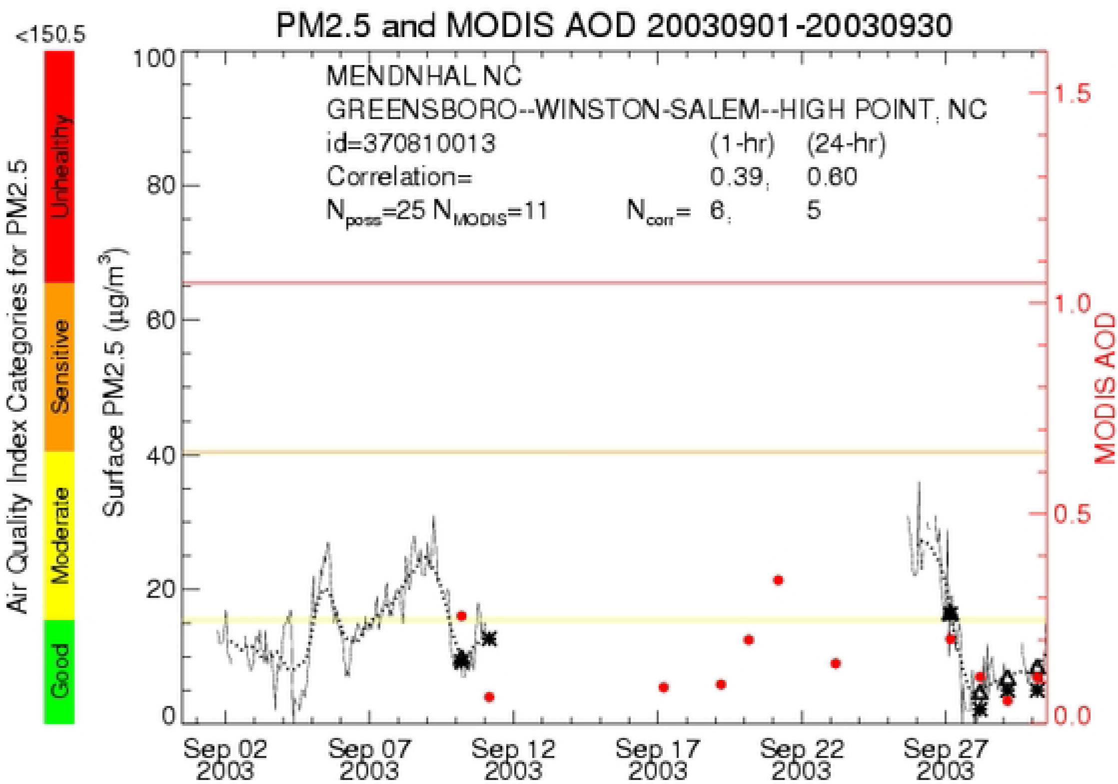

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
GPORT YC MS
BILOXI-GULFPORT-PASCAGOULA, MS
id=280470008 (1-hr) (24-hr)
Correlation= 0.84, 0.61
N_poss=27 N_MODIS=11 N_corr= 11, 10
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
JAXCOURT MS
JACKSON, MS
id=280490018 (1-hr) (24-hr)
Correlation= 0.75, 0.80
N_poss=28 N_MODIS=13 N_corr= 13, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

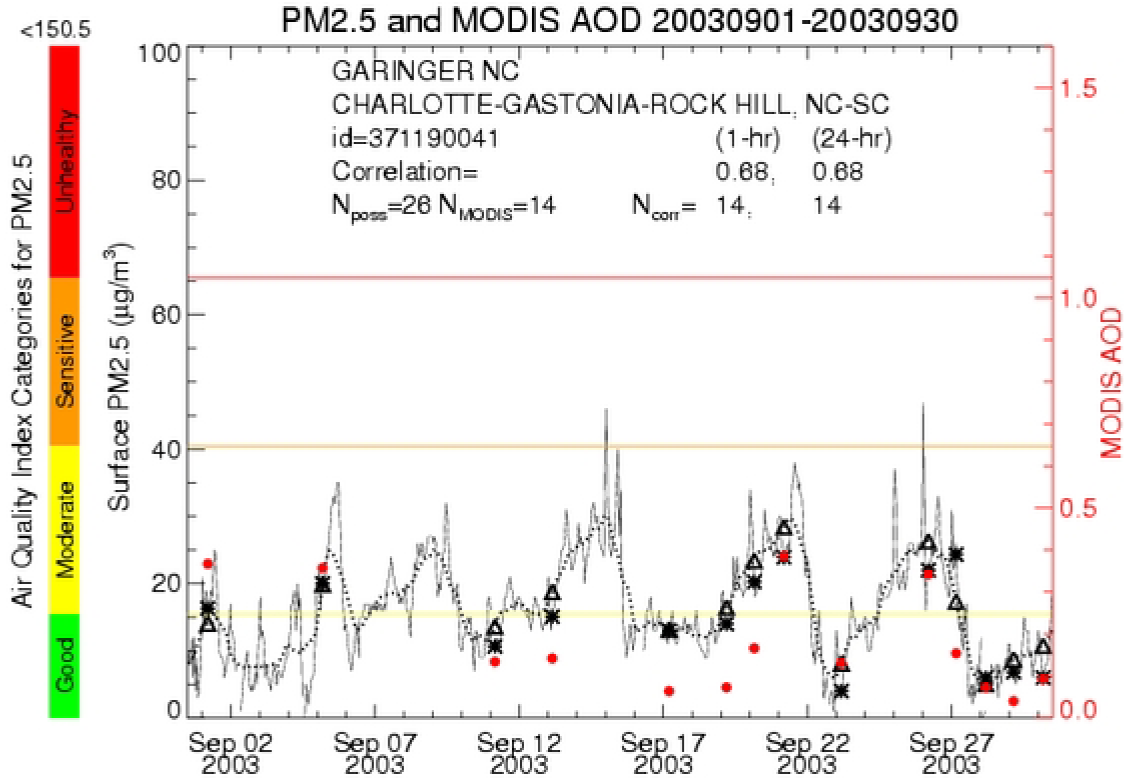

PM2.5 and MODIS AOD 20030901-20030930
<150.5
HICKORY NC
HICKORY-MORGANTON-LENOIR, NC
id=370350004 (1-hr) (24-hr)
Correlation= 0.95, 0.86
N_poss=26 N_MODIS=14 N_corr= 5, 5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

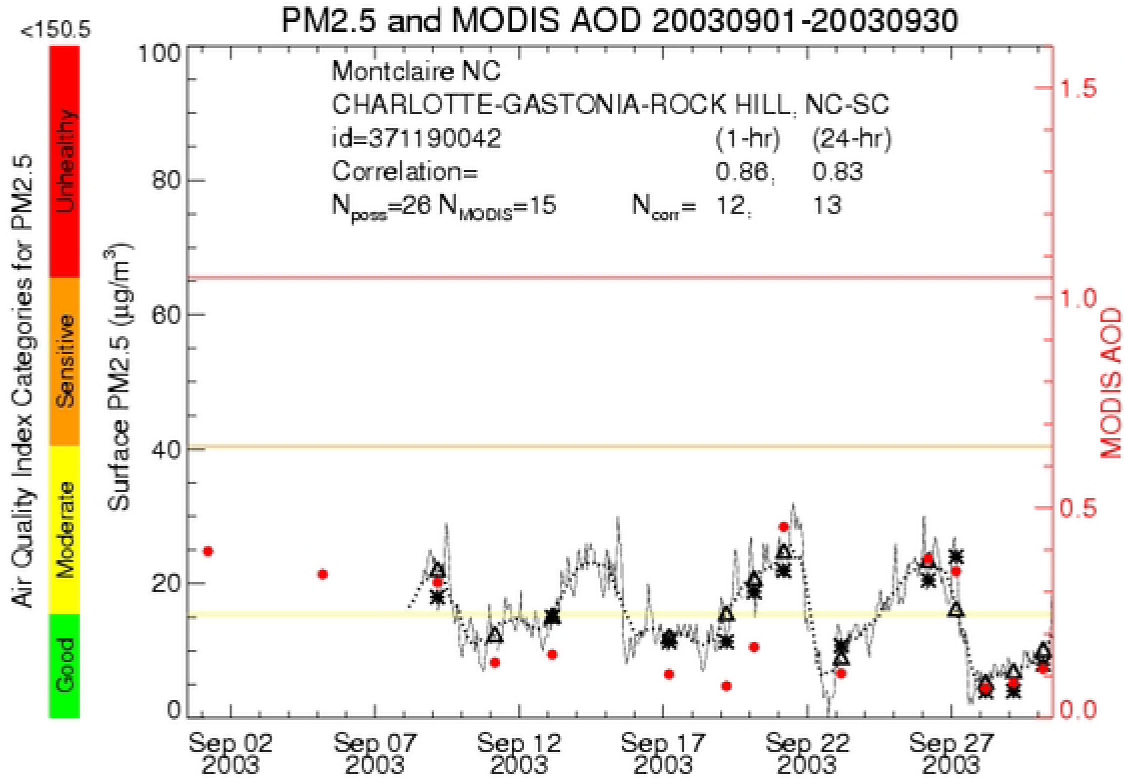


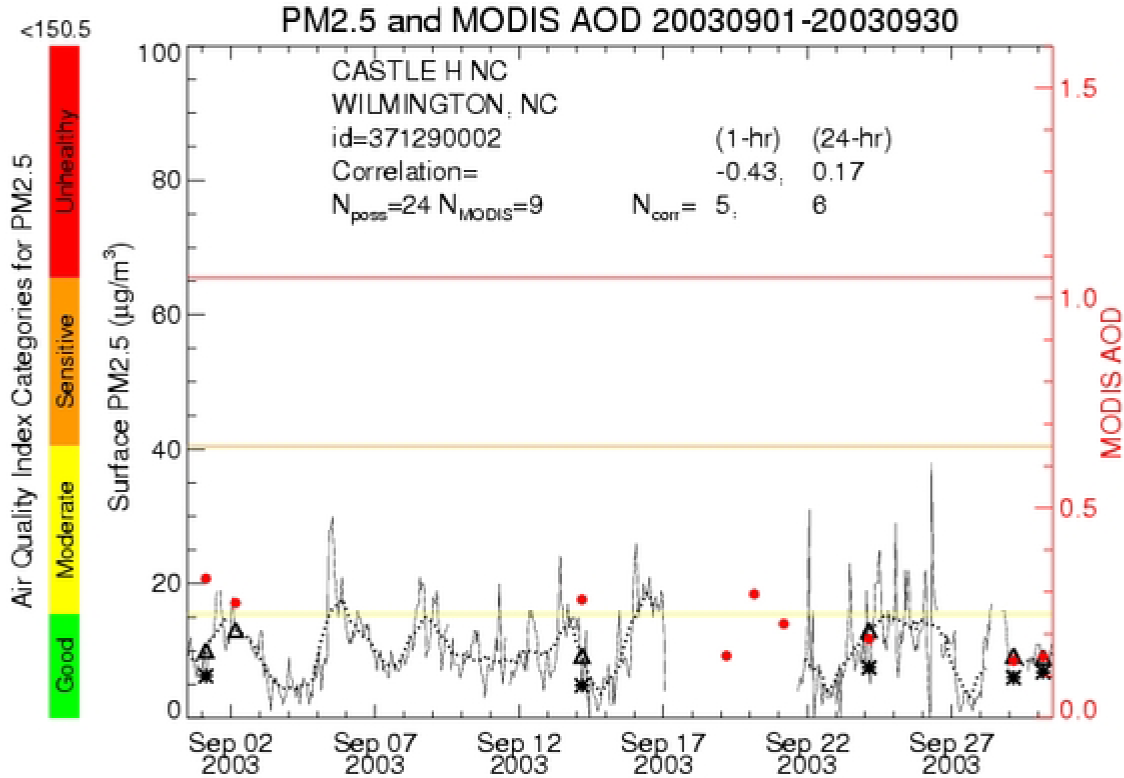
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
HATTIEAVEN NC
GREENSBORO--WINSTON-SALEM--HIGH POINT, NC
id=370670022 (1-hr) (24-hr)
Correlation= 0.82; 0.72
Nposs=25 NMODIS=14 Ncorr= 13; 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

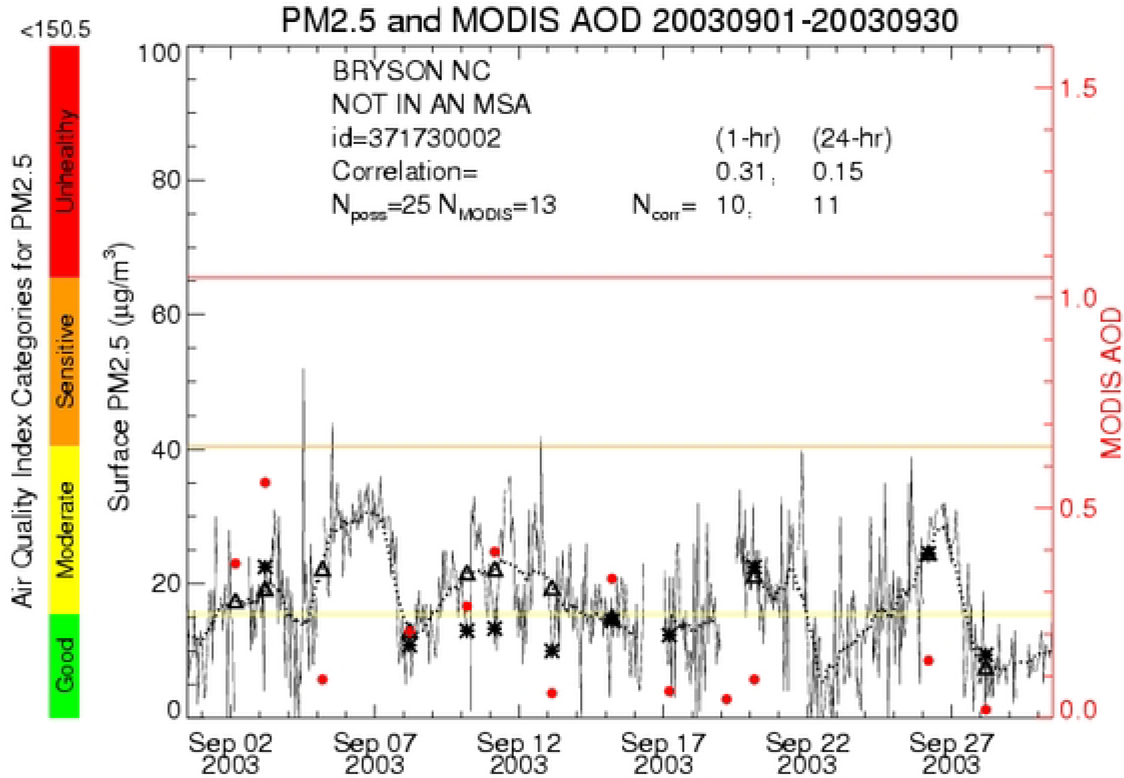


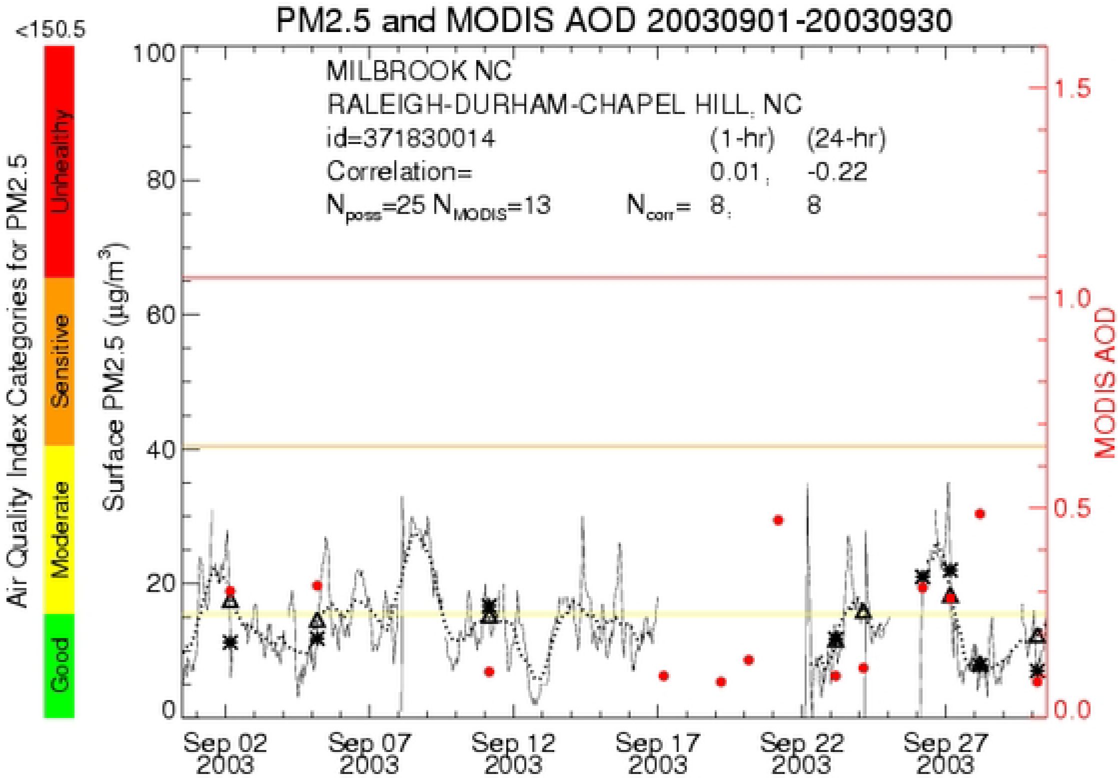
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
MENDNHAL NC
GREENSBORO--WINSTON-SALEM--HIGH POINT, NC
id=370810013 (1-hr) (24-hr)
Correlation= 0.39; 0.60
Nposs=25 NMODIS=11 Ncorr= 6; 5
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
GARINGER NC
CHARLOTTE-GASTONIA-ROCK HILL, NC-SC
id=371190041 (1-hr) (24-hr)
Correlation= 0.68, 0.68
Nposs=26 NMODIS=14 Ncorr= 14, 14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

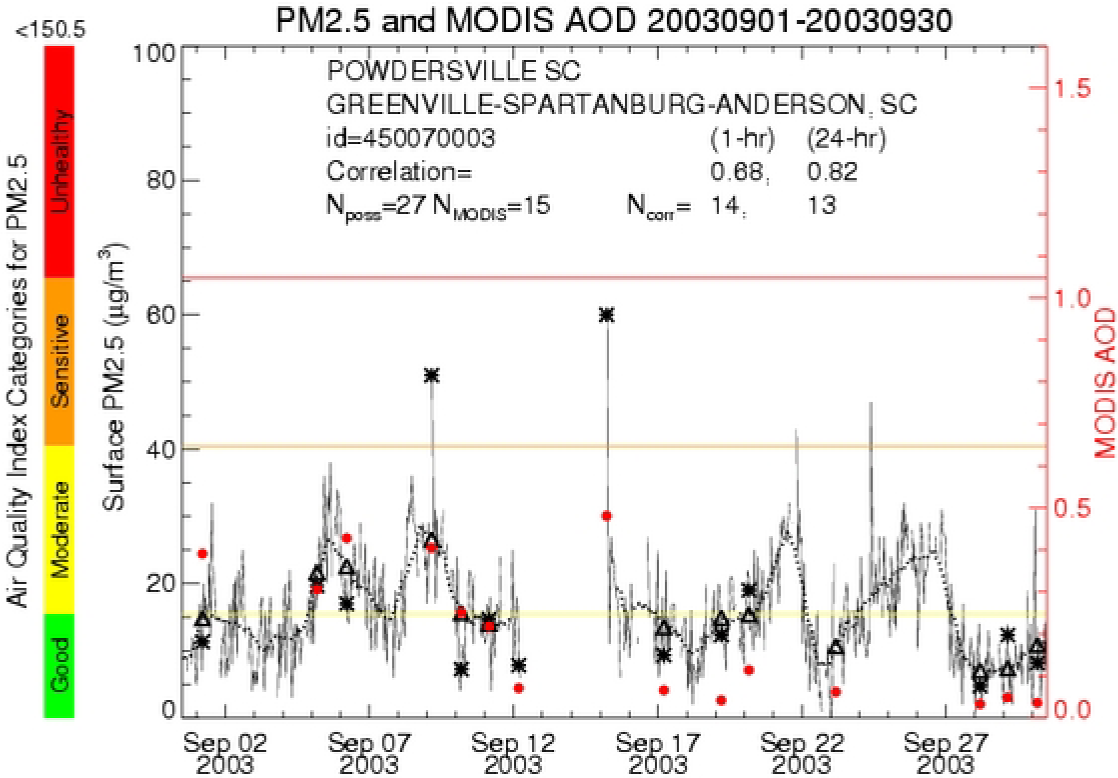

PM2.5 and MODIS AOD 20030901-20030930
Montclaire NC
CHARLOTTE-GASTONIA-ROCK HILL, NC-SC
id=371190042 (1-hr) (24-hr)
Correlation= 0.86, 0.83
Nposs=26 NMODIS=15 Ncorr= 12, 13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
CASTLE H NC
WILMINGTON, NC
id=371290002
Correlation=
(1-hr) (24-hr)
-0.43, 0.17
N_{poss}=24 N_{MODIS}=9
N_{corr}= 5, 6
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

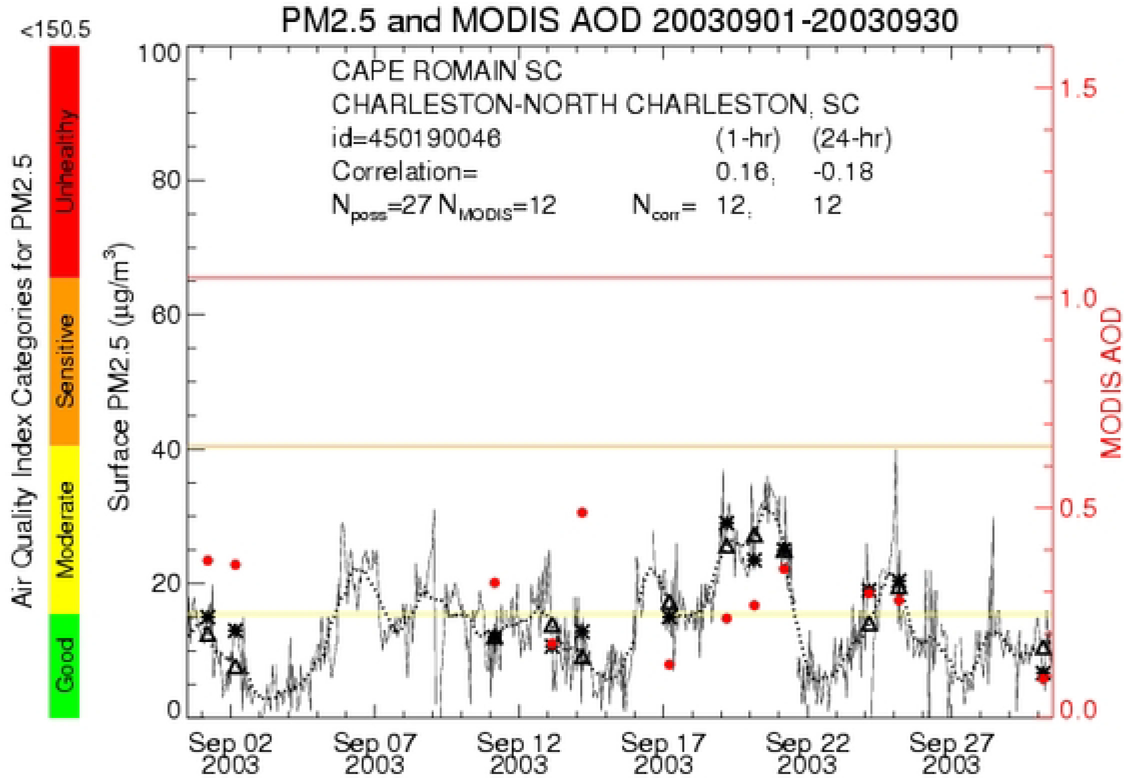

PM2.5 and MODIS AOD 20030901-20030930
BRYSON NC
NOT IN AN MSA
id=371730002
Correlation=
(1-hr) (24-hr)
0.31, 0.15
N_{poss}=25 N_{MODIS}=13
N_{corr}= 10, 11
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

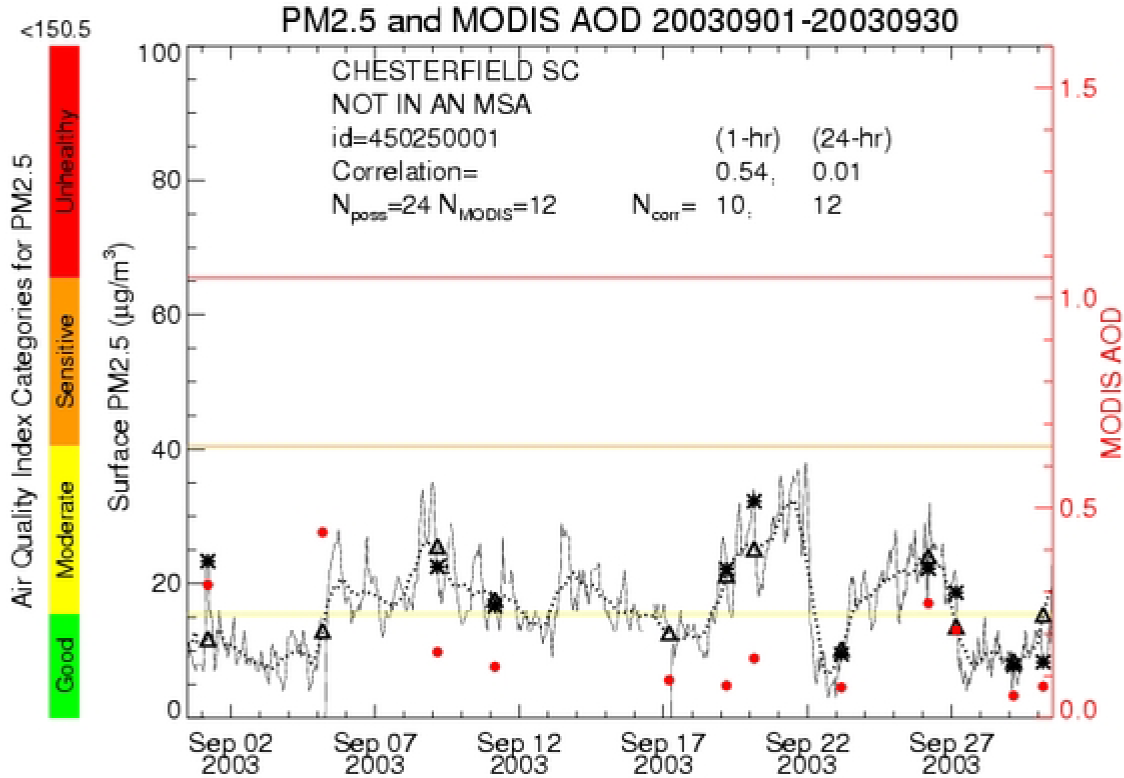


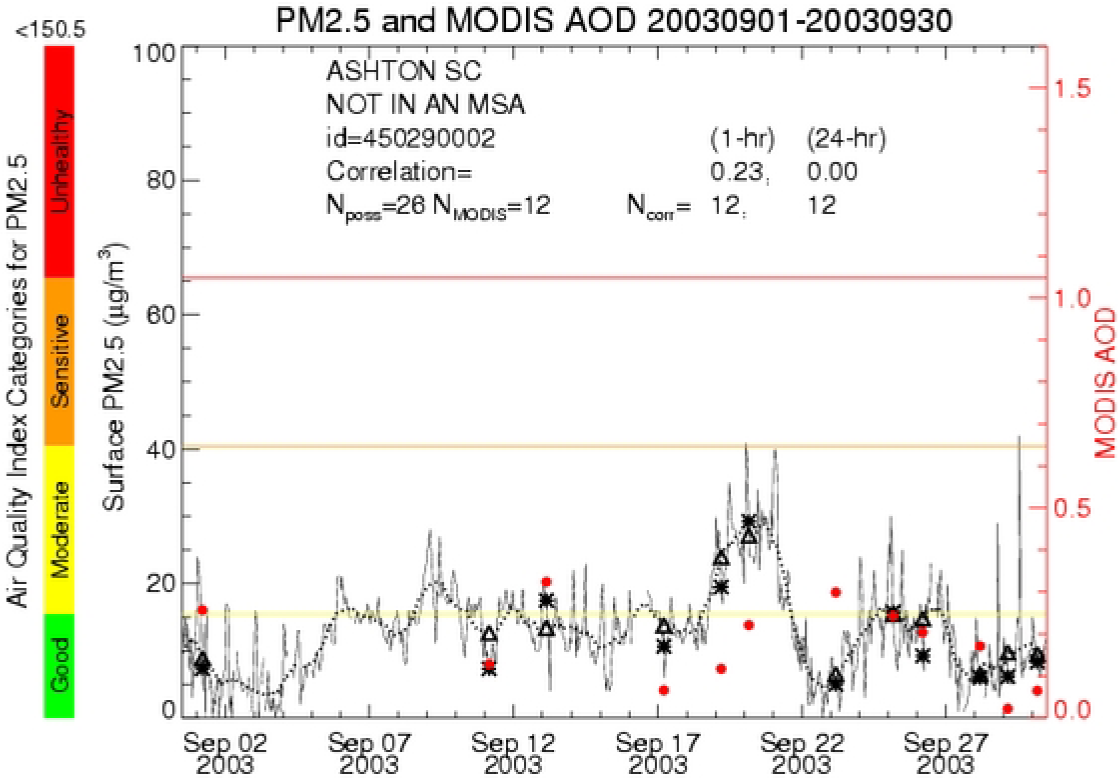
PM2.5 and MODIS AOD 20030901-20030930
<150.5
MILBROOK NC
RALEIGH-DURHAM-CHAPEL HILL, NC
id=371830014 (1-hr) (24-hr)
Correlation= 0.01, -0.22
N_poss=25 N_MODIS=13 N_corr= 8, 8
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



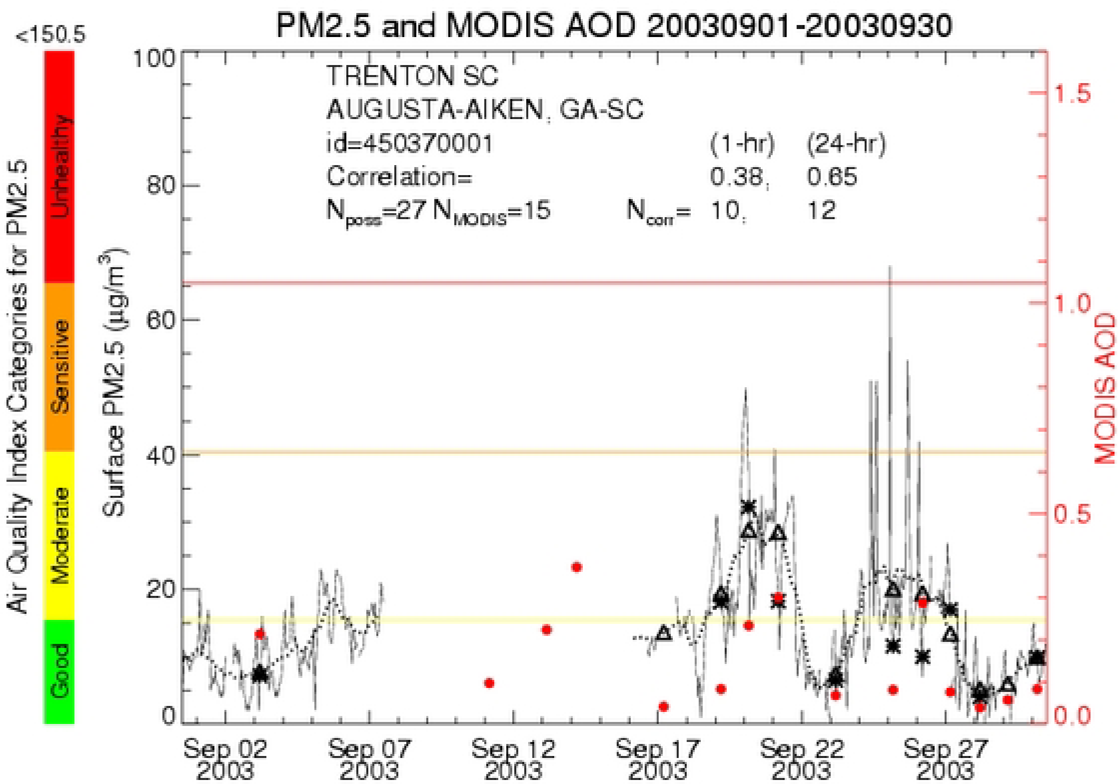
PM2.5 and MODIS AOD 20030901-20030930
<150.5
POWDERSVILLE SC
GREENVILLE-SPARTANBURG-ANDERSON, SC
id=450070003 (1-hr) (24-hr)
Correlation= 0.68, 0.82
N_poss=27 N_MODIS=15 N_corr= 14, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
CAPE ROMAIN SC
CHARLESTON-NORTH CHARLESTON, SC
id=450190046 (1-hr) (24-hr)
Correlation= 0.16, -0.18
N_poss=27 N_MODIS=12 N_corr= 12, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

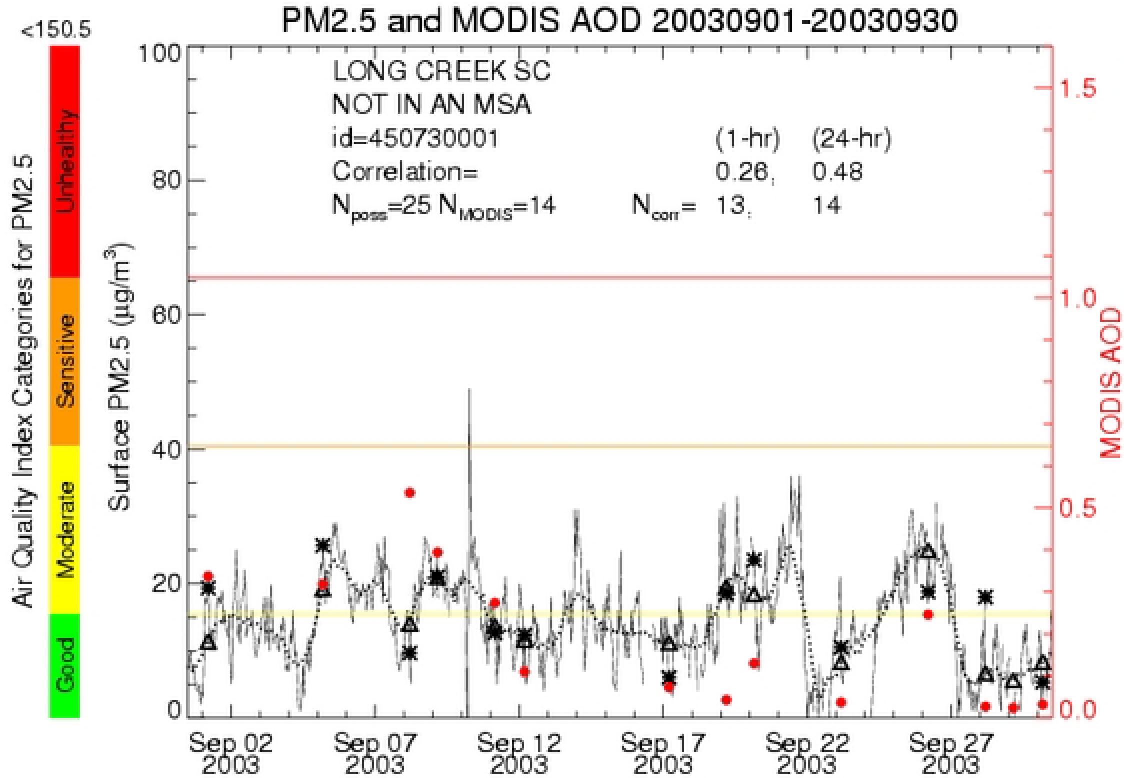

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
CHESTERFIELD SC
NOT IN AN MSA
id=450250001 (1-hr) (24-hr)
Correlation= 0.54, 0.01
N_poss=24 N_MODIS=12 N_corr= 10, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

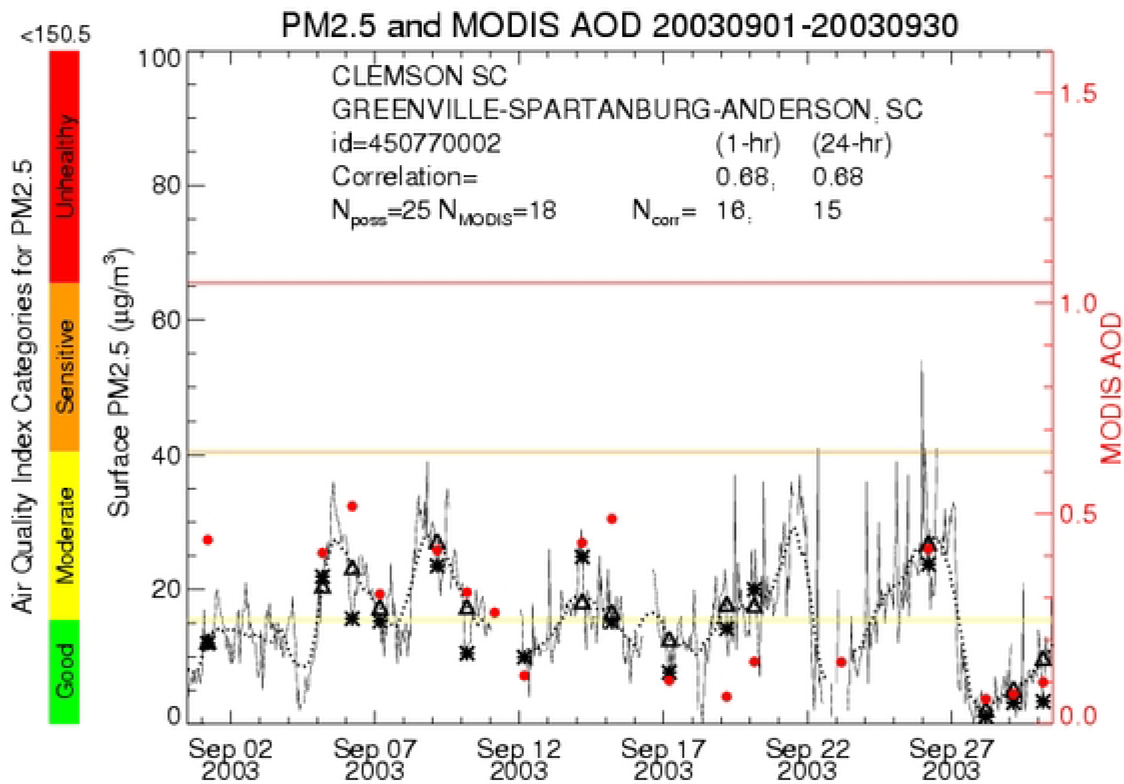


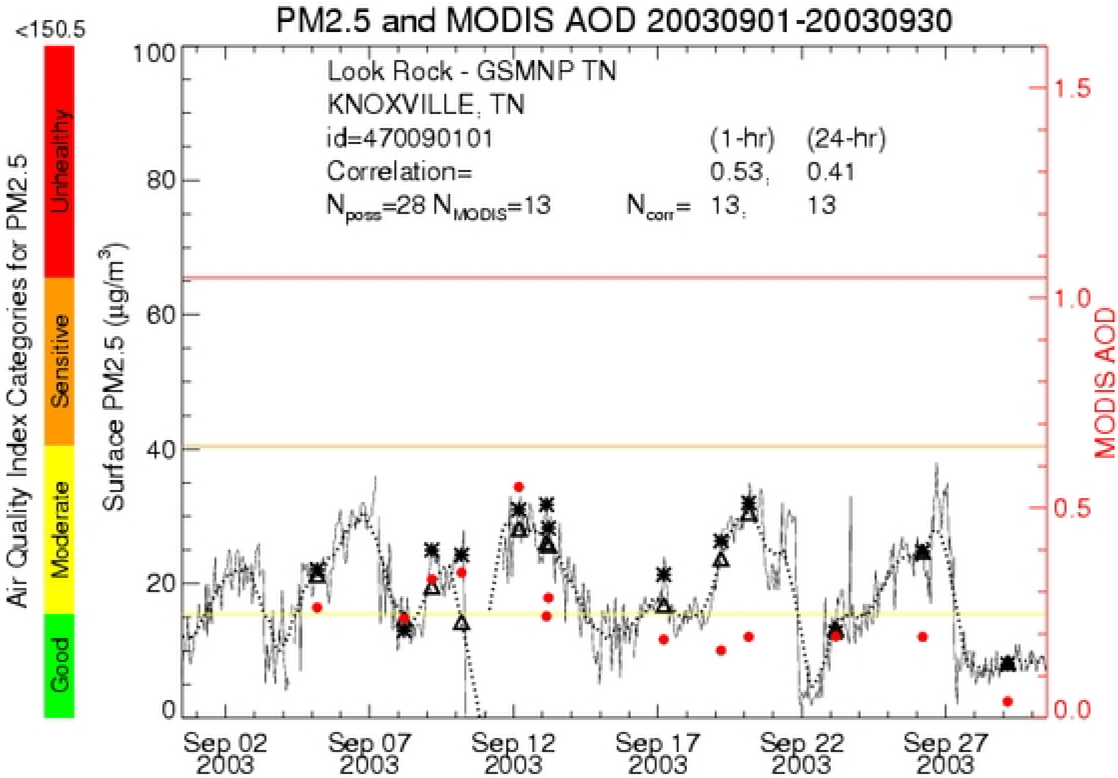
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
ASHTON SC
NOT IN AN MSA
id=450290002
Correlation=
(1-hr) (24-hr)
0.23, 0.00
N_poss=26 N_MODIS=12 N_corr= 12, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

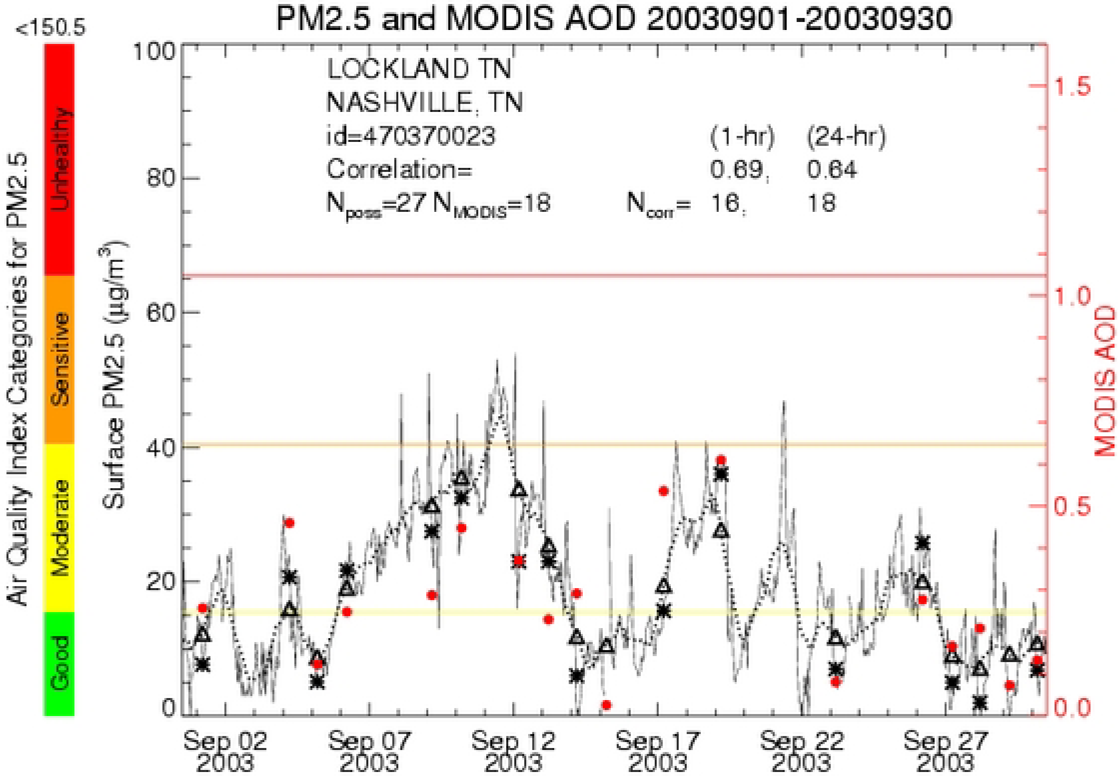


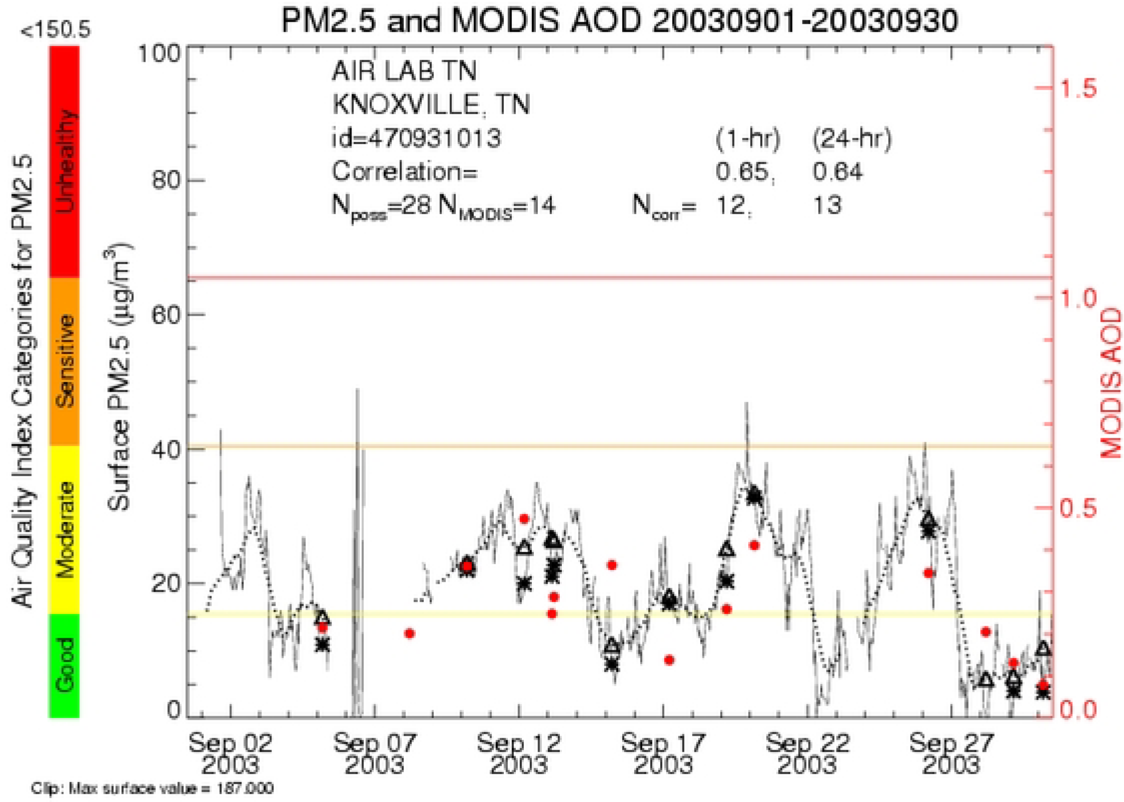
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
TRENTON SC
AUGUSTA-AIKEN, GA-SC
id=450370001
Correlation=
(1-hr) (24-hr)
0.38, 0.65
N_poss=27 N_MODIS=15 N_corr= 10, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

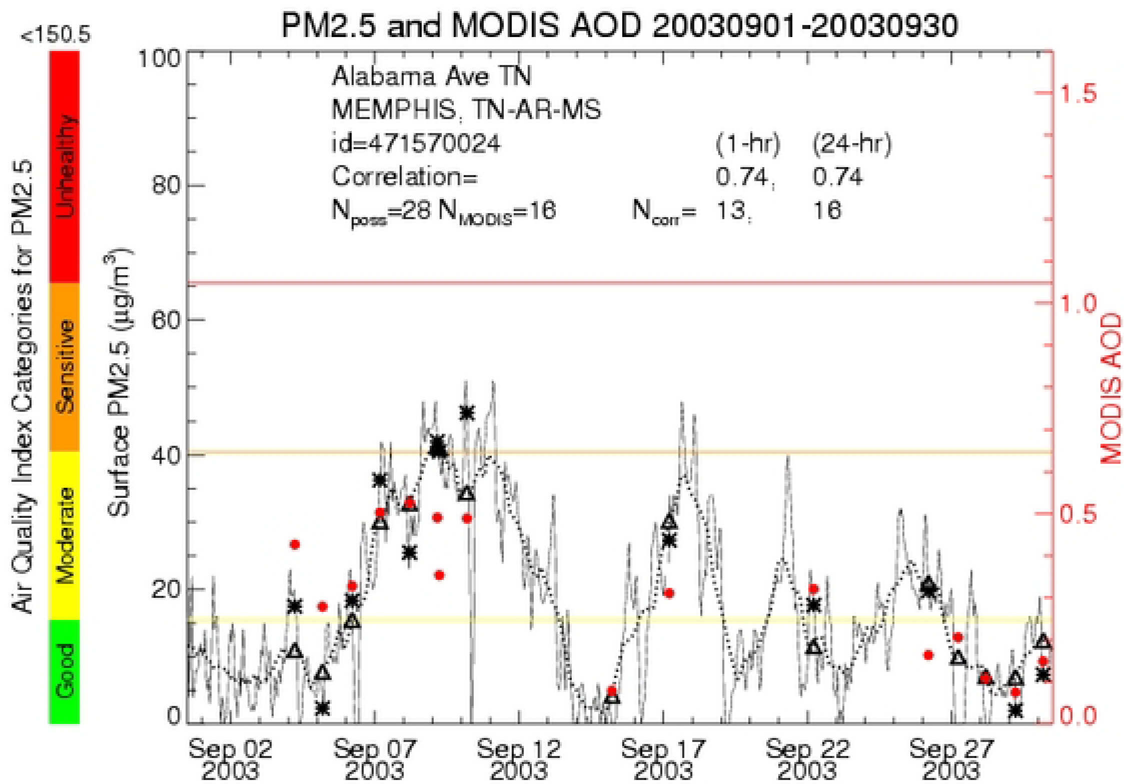

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
LONG CREEK SC
NOT IN AN MSA
id=450730001 (1-hr) (24-hr)
Correlation= 0.26; 0.48
Nposs=25 NMODIS=14 Ncorr= 13; 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

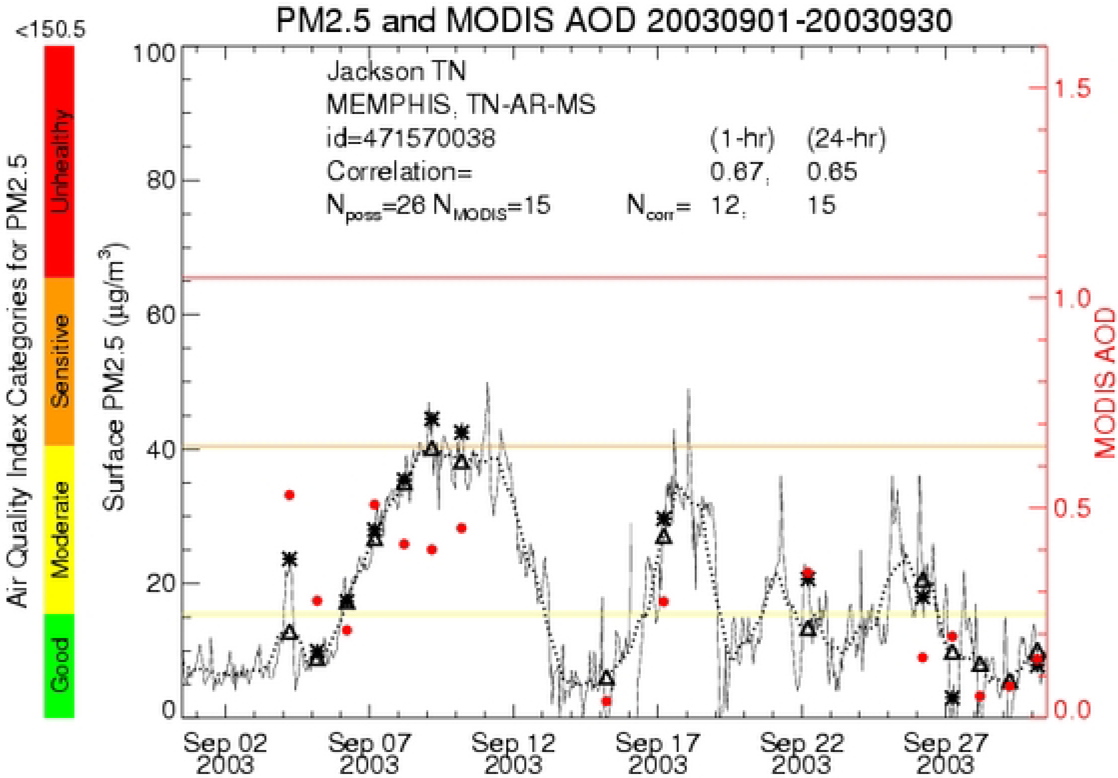

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
CLEMSON SC
GREENVILLE-SPARTANBURG-ANDERSON, SC
id=450770002 (1-hr) (24-hr)
Correlation= 0.68; 0.68
Nposs=25 NMODIS=18 Ncorr= 16; 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

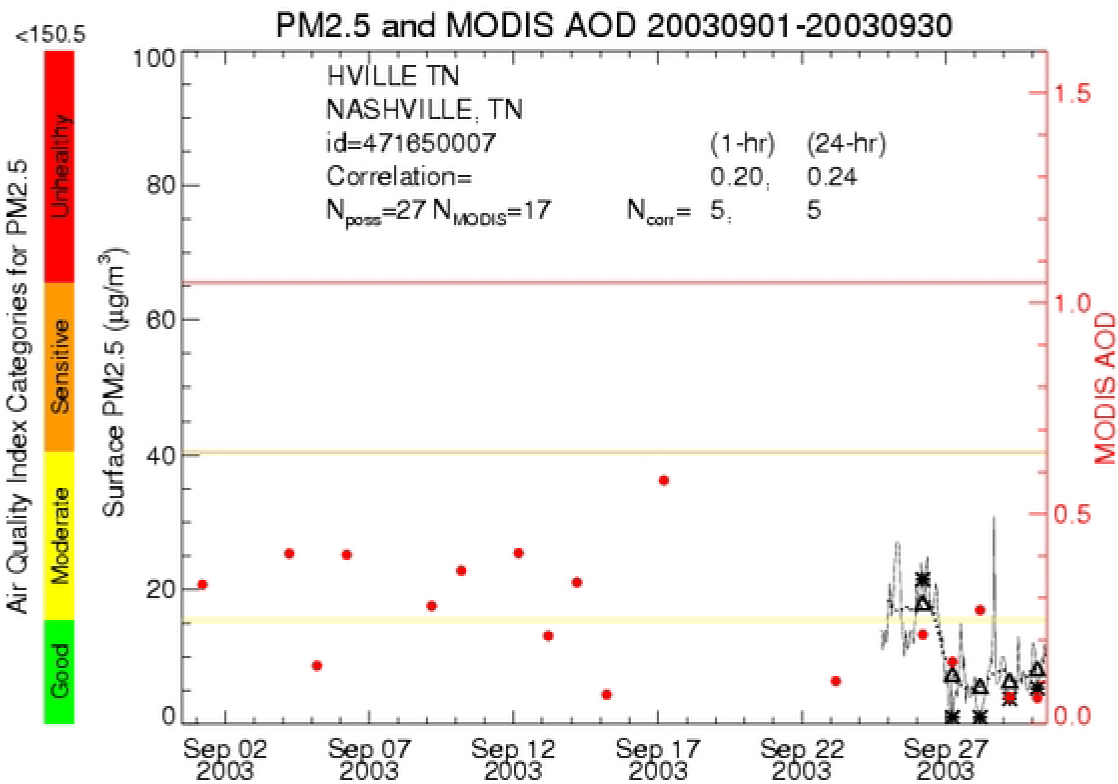

PM2.5 and MODIS AOD 20030901-20030930
Look Rock - GSMNP TN
KNOXVILLE, TN
id=470090101
(1-hr)
(24-hr)
Correlation=
0.53,
0.41
Nposs=28 NMODIS=13
Ncorr=
13,
13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
LOCKLAND TN
NASHVILLE, TN
id=470370023
(1-hr)
(24-hr)
Correlation=
0.69,
0.64
Nposs=27 NMODIS=18
Ncorr=
16,
18
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

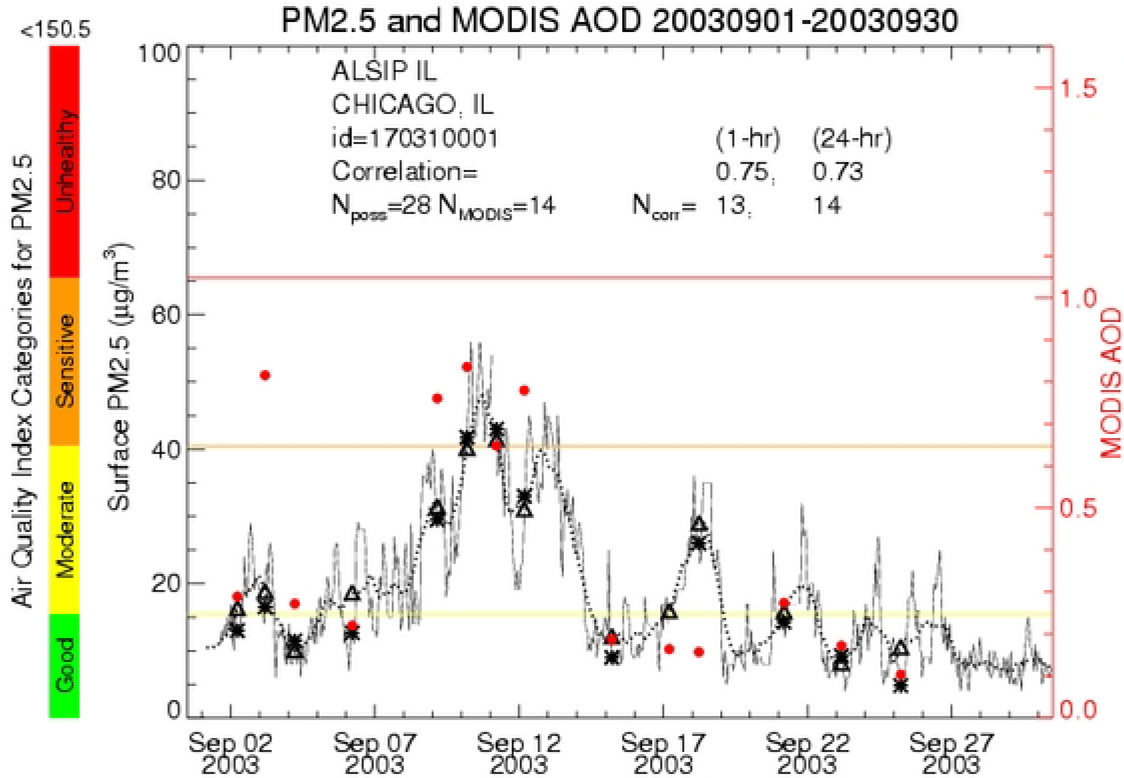

PM2.5 and MODIS AOD 20030901-20030930
<150.5
AIR LAB TN
KNOXVILLE, TN
id=470931013
Correlation=
(1-hr) (24-hr)
0.65, 0.64
Nposs=28 NMODIS=14 Ncorr= 12, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 187.000

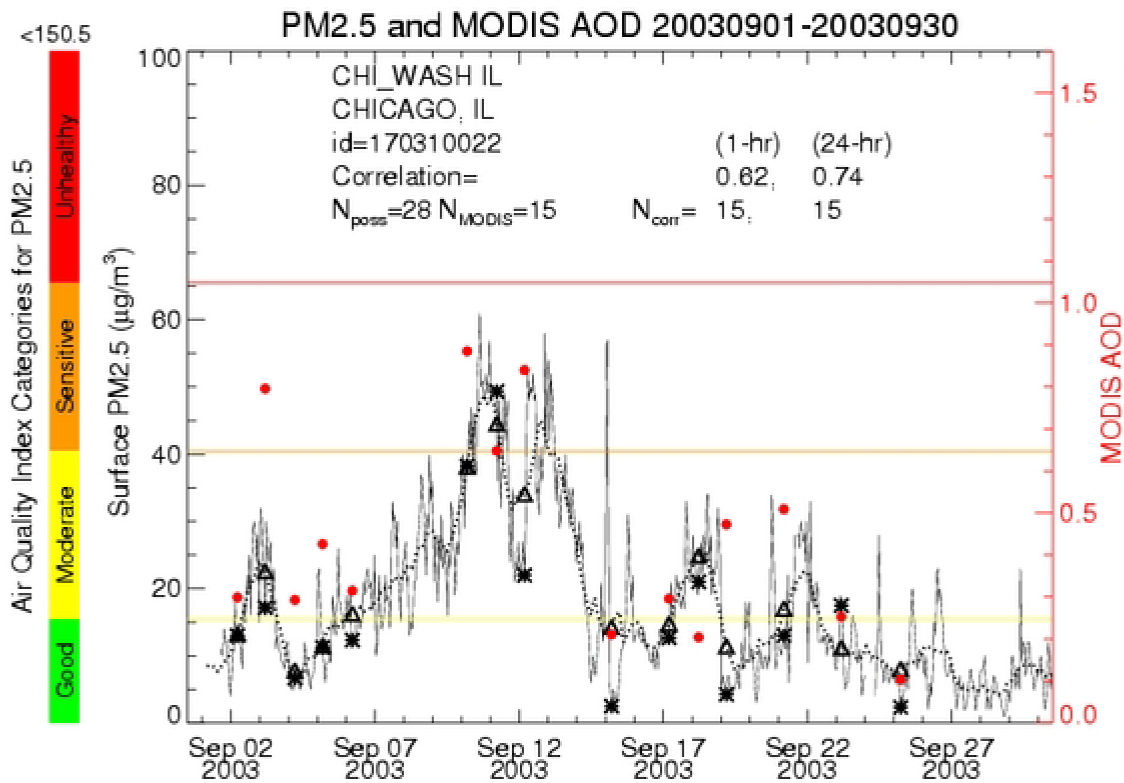

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Alabama Ave TN
MEMPHIS, TN-AR-MS
id=471570024
Correlation=
(1-hr) (24-hr)
0.74, 0.74
Nposs=28 NMODIS=16 Ncorr= 13, 16
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

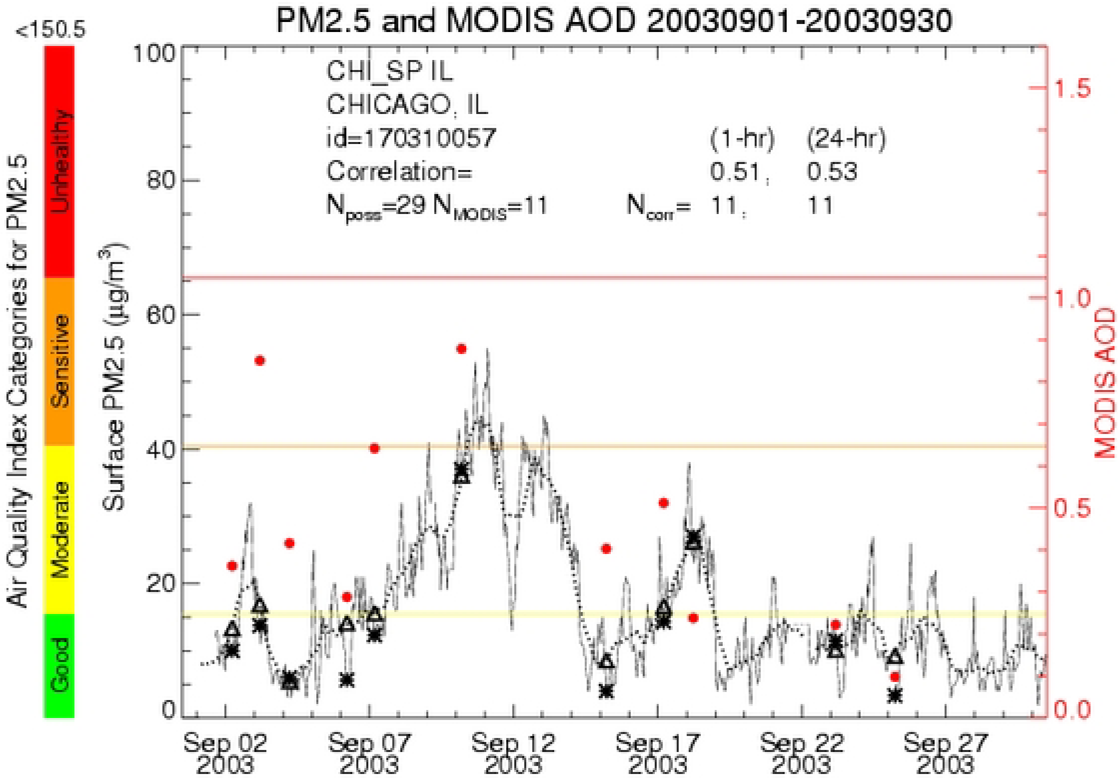

PM2.5 and MODIS AOD 20030901-20030930
Jackson TN
MEMPHIS, TN-AR-MS
id=471570038
(1-hr) (24-hr)
Correlation= 0.67, 0.65
Nposs=26 NMODIS=15 Ncorr= 12, 15
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
HVILLE TN
NASHVILLE, TN
id=471650007
(1-hr) (24-hr)
Correlation= 0.20, 0.24
Nposs=27 NMODIS=17 Ncorr= 5, 5
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

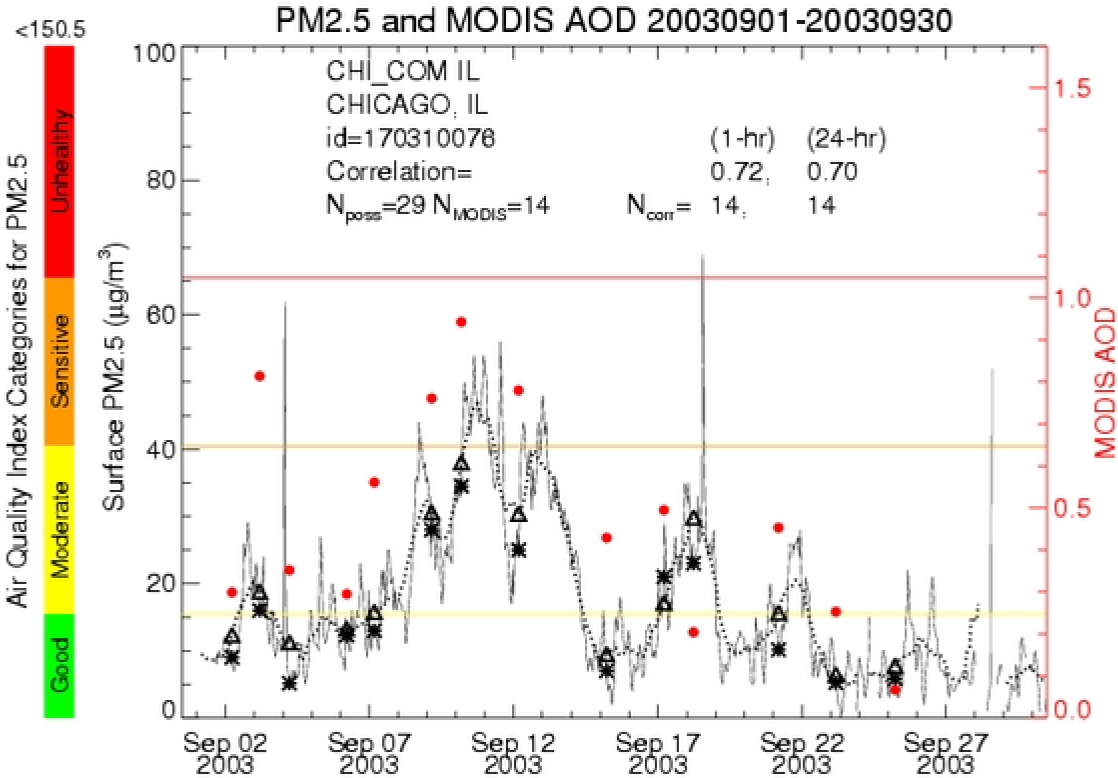
Region 5


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
ALSIP IL
CHICAGO, IL
id=170310001
(1-hr) (24-hr)
Correlation= 0.75, 0.73
N_poss=28 N_MODIS=14 N_corr= 13, 14
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

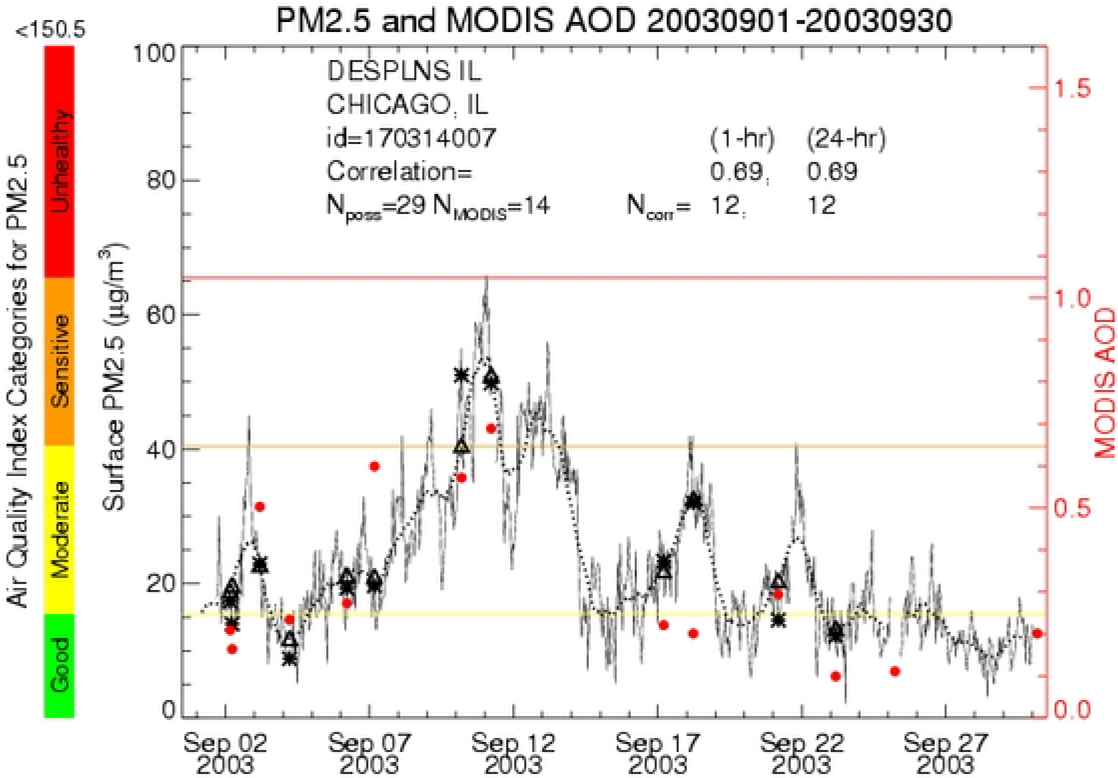

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
CHI_WASH IL
CHICAGO, IL
id=170310022
(1-hr) (24-hr)
Correlation= 0.62, 0.74
N_poss=28 N_MODIS=15 N_corr= 15, 15
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

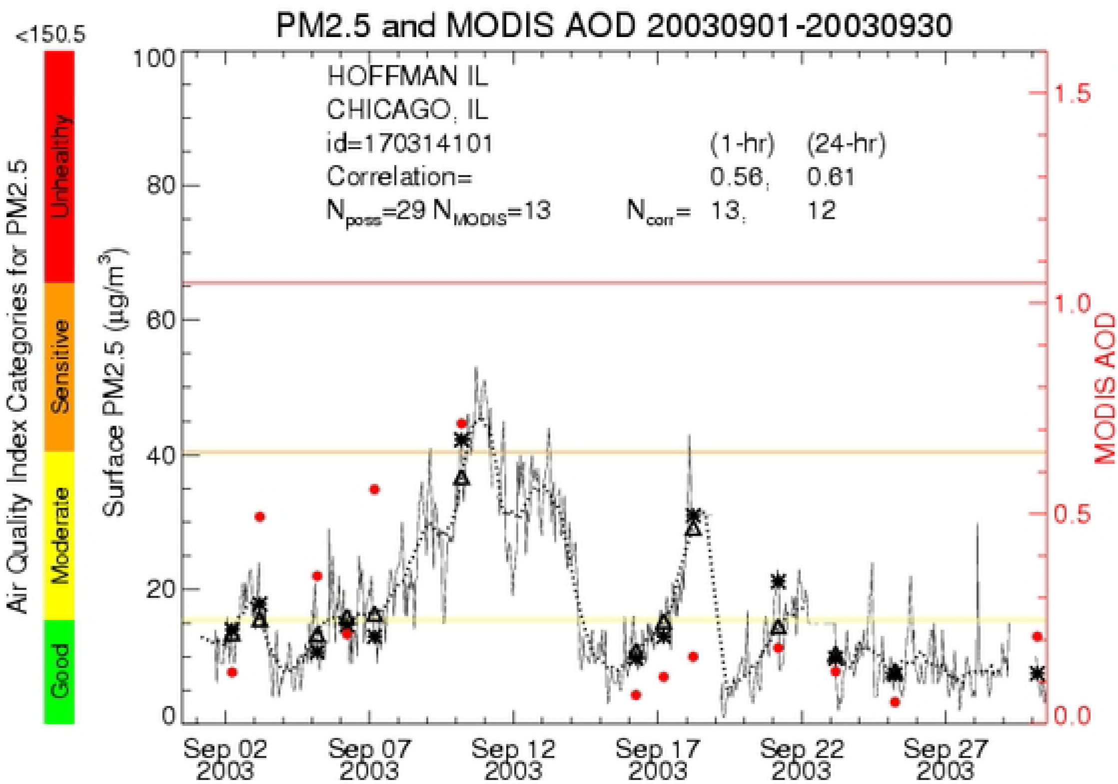


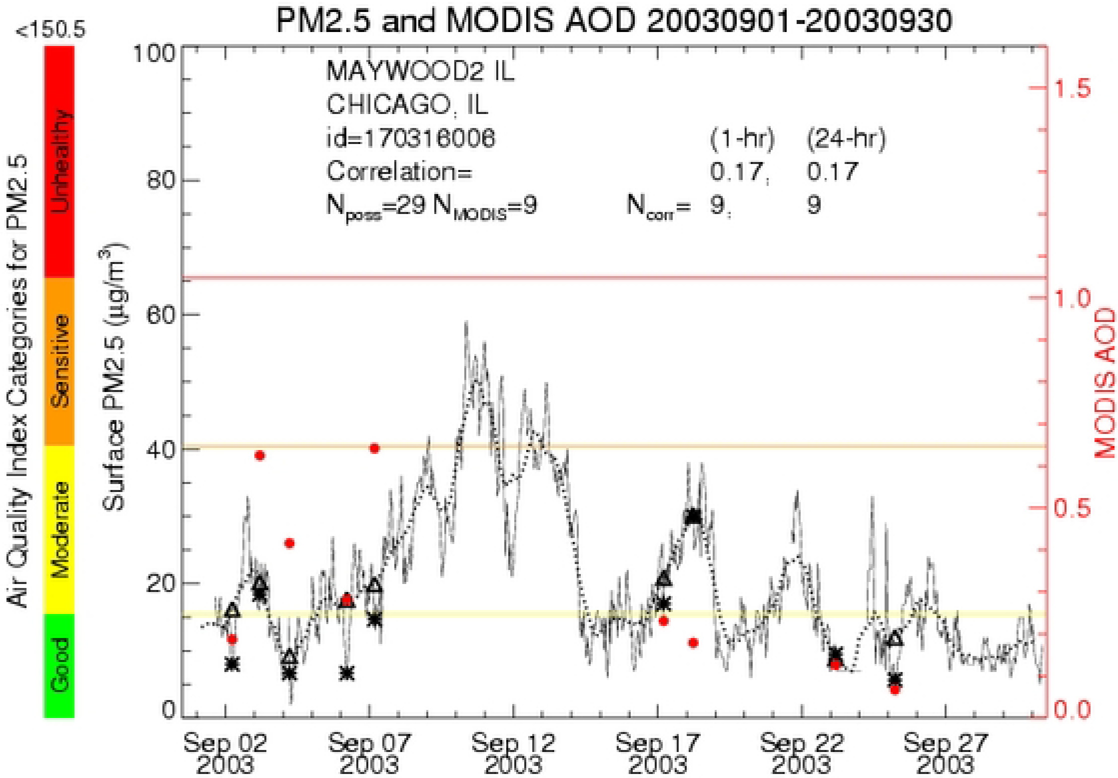
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
CHI_SP IL
CHICAGO, IL
id=170310057
Correlation=
Nposs=29 NMODIS=11
(1-hr) (24-hr)
0.51, 0.53
Ncorr= 11, 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

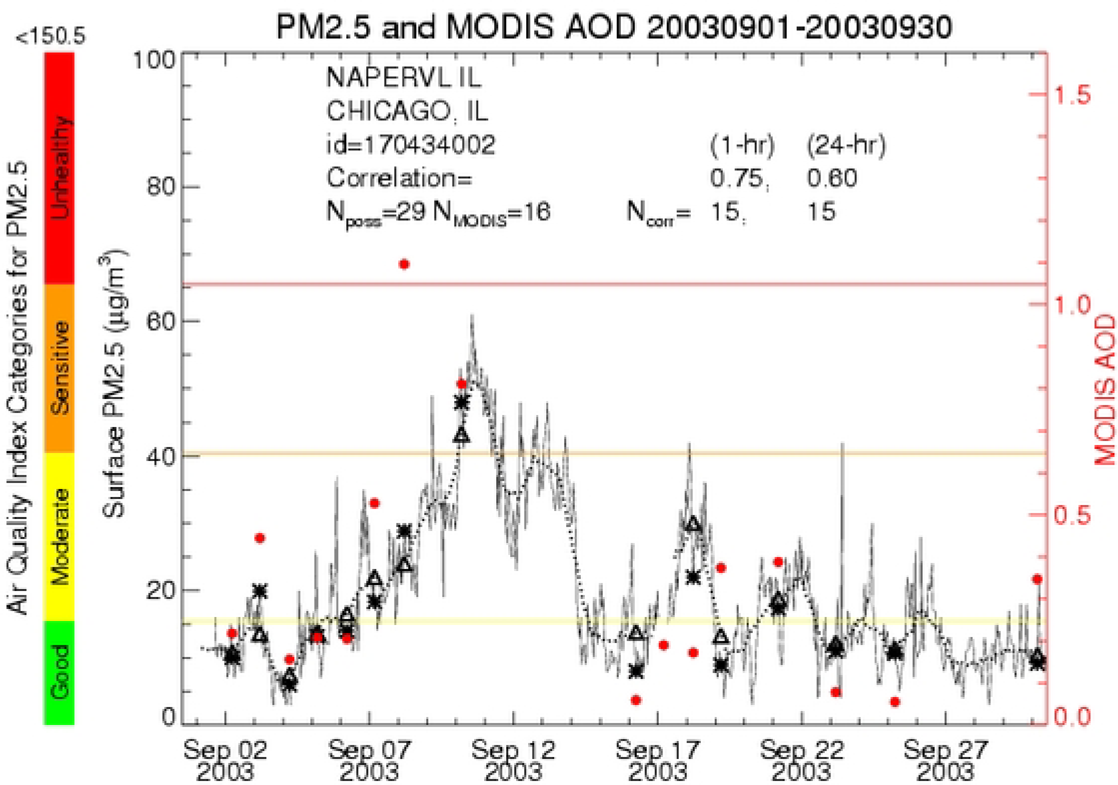


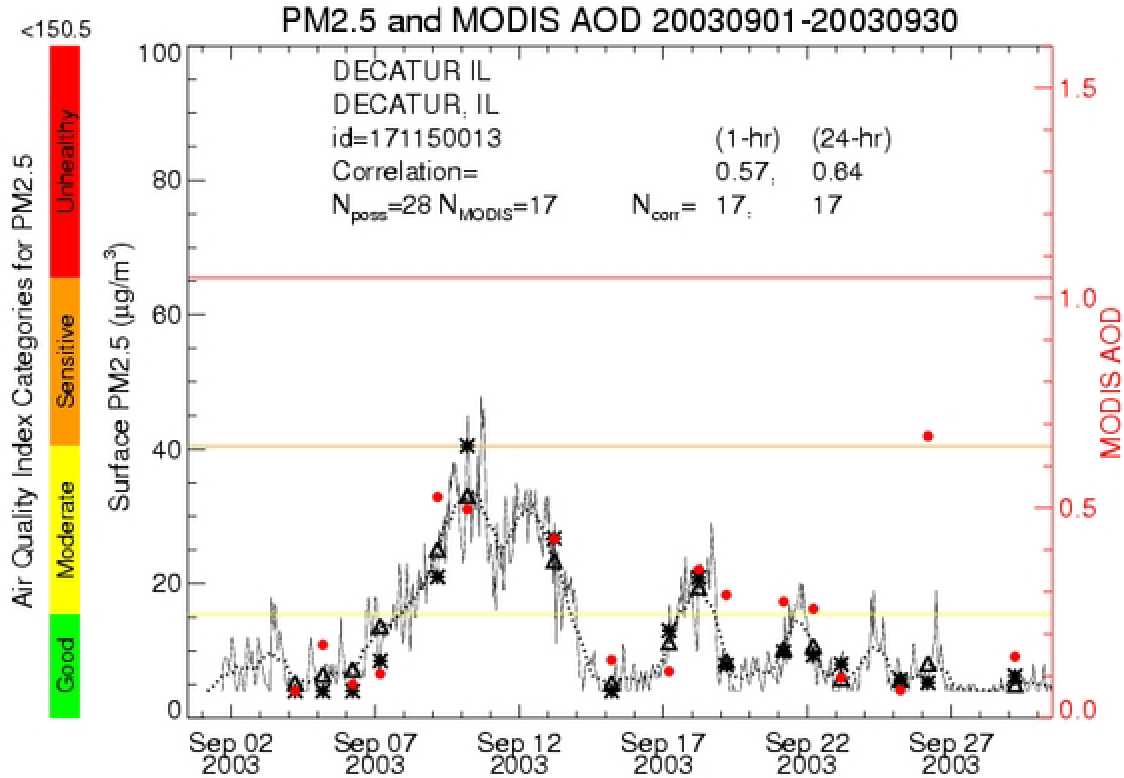
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
CHI_COM IL
CHICAGO, IL
id=170310076
Correlation=
Nposs=29 NMODIS=14
(1-hr) (24-hr)
0.72, 0.70
Ncorr= 14, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

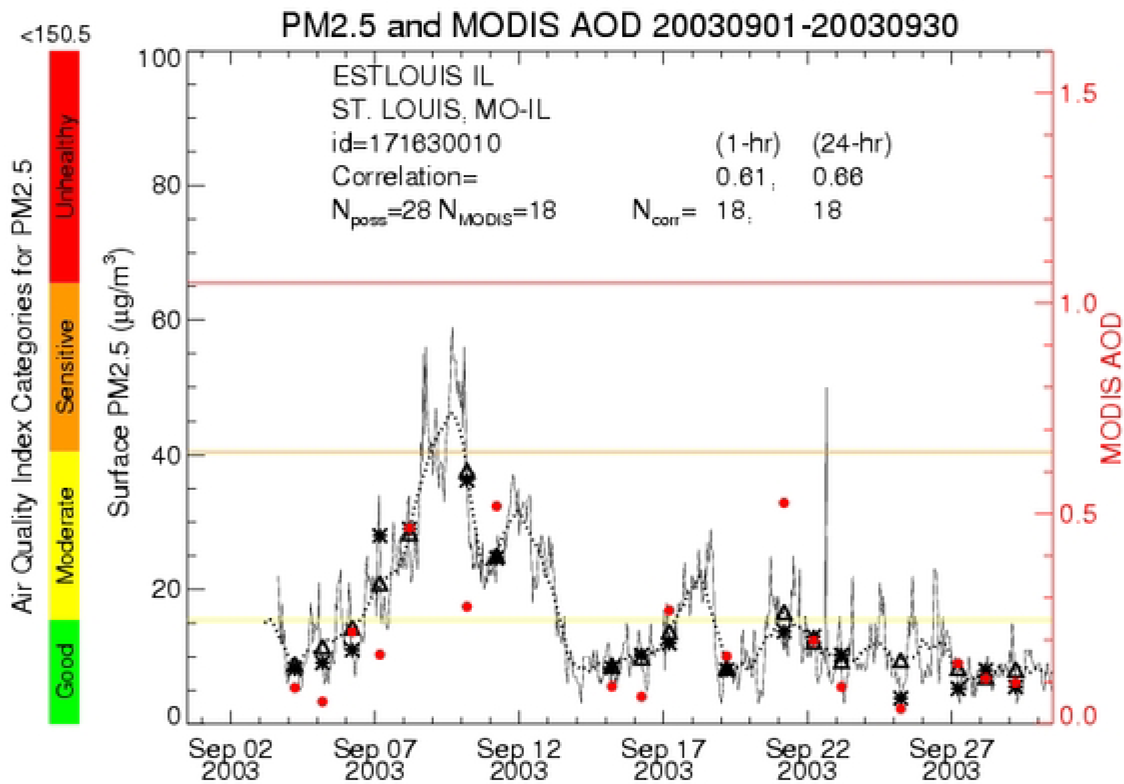

PM2.5 and MODIS AOD 20030901-20030930
DESPLNS IL
CHICAGO, IL
id=170314007
Correlation=
(1-hr) (24-hr)
0.69, 0.69
Nposs=29 NMODIS=14
Ncorr= 12, 12
Surface PM2.5 (μg/m3)
MODIS AOD
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

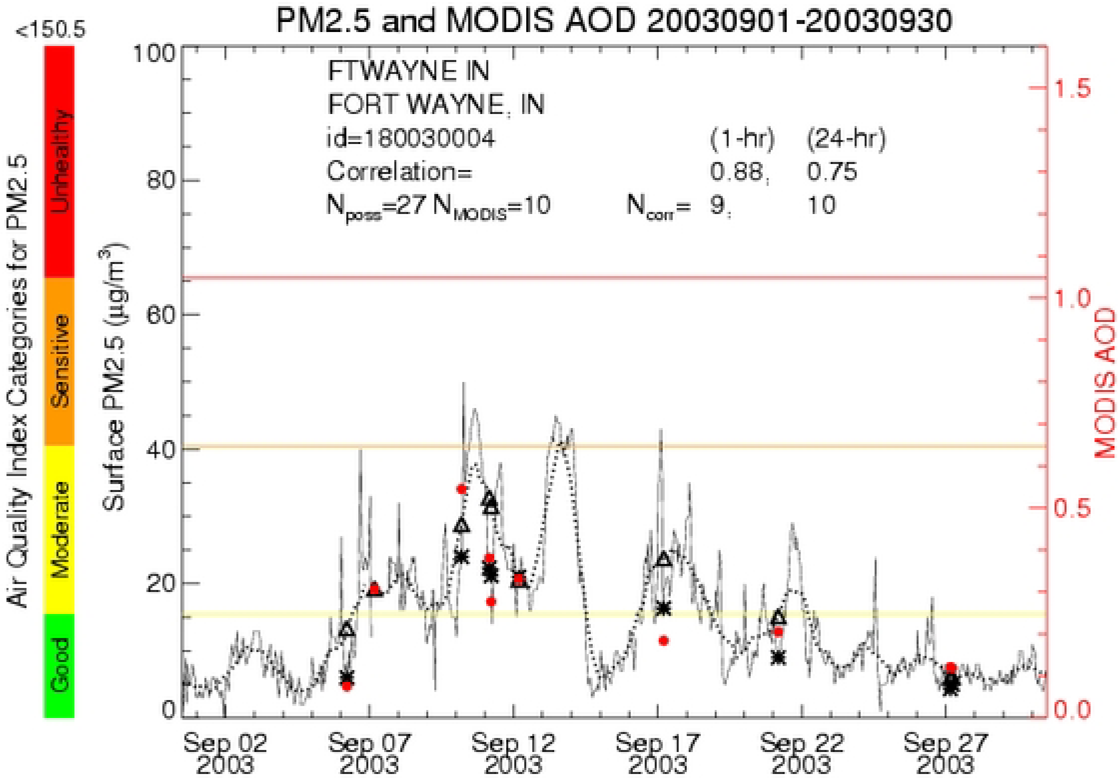

PM2.5 and MODIS AOD 20030901-20030930
HOFFMAN IL
CHICAGO, IL
id=170314101
Correlation=
(1-hr) (24-hr)
0.56, 0.61
Nposs=29 NMODIS=13
Ncorr= 13, 12
Surface PM2.5 (μg/m3)
MODIS AOD
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
MAYWOOD2 IL
CHICAGO, IL
id=170316006
(1-hr) (24-hr)
Correlation= 0.17, 0.17
Nposs=29 NMODIS=9 Ncorr= 9, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

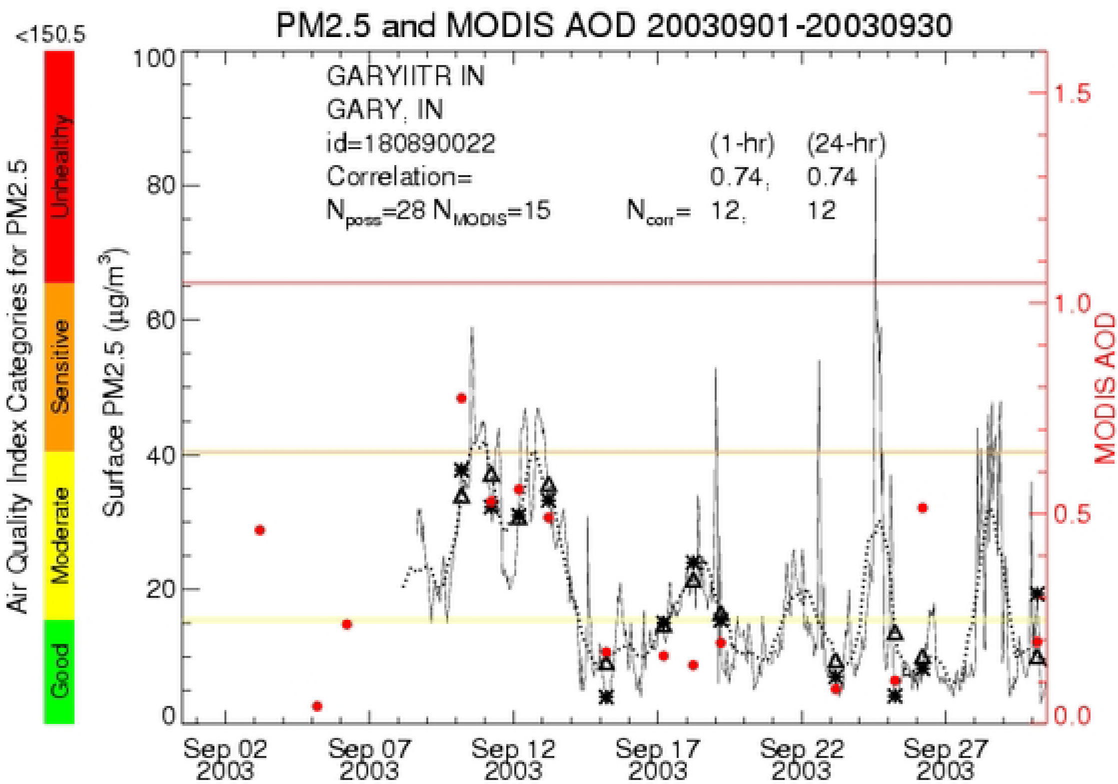

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
NAPERVL IL
CHICAGO, IL
id=170434002
(1-hr) (24-hr)
Correlation= 0.75, 0.60
Nposs=29 NMODIS=16 Ncorr= 15, 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
DECATUR IL
DECATUR, IL
id=171150013
Correlation=
(1-hr) (24-hr)
0.57, 0.64
N_{poss}=28 N_{MODIS}=17 N_{corr}= 17, 17
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

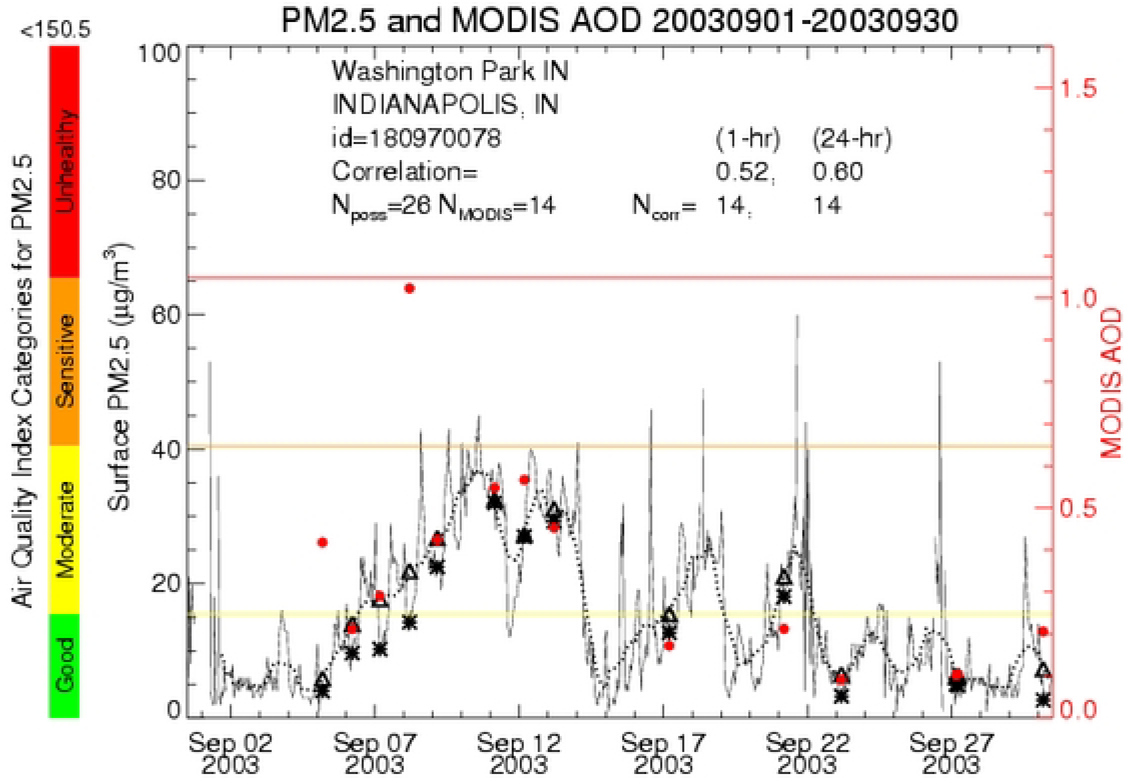

PM2.5 and MODIS AOD 20030901-20030930
ESTLOUIS IL
ST. LOUIS, MO-IL
id=171630010
Correlation=
(1-hr) (24-hr)
0.61, 0.66
N_{poss}=28 N_{MODIS}=18 N_{corr}= 18, 18
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

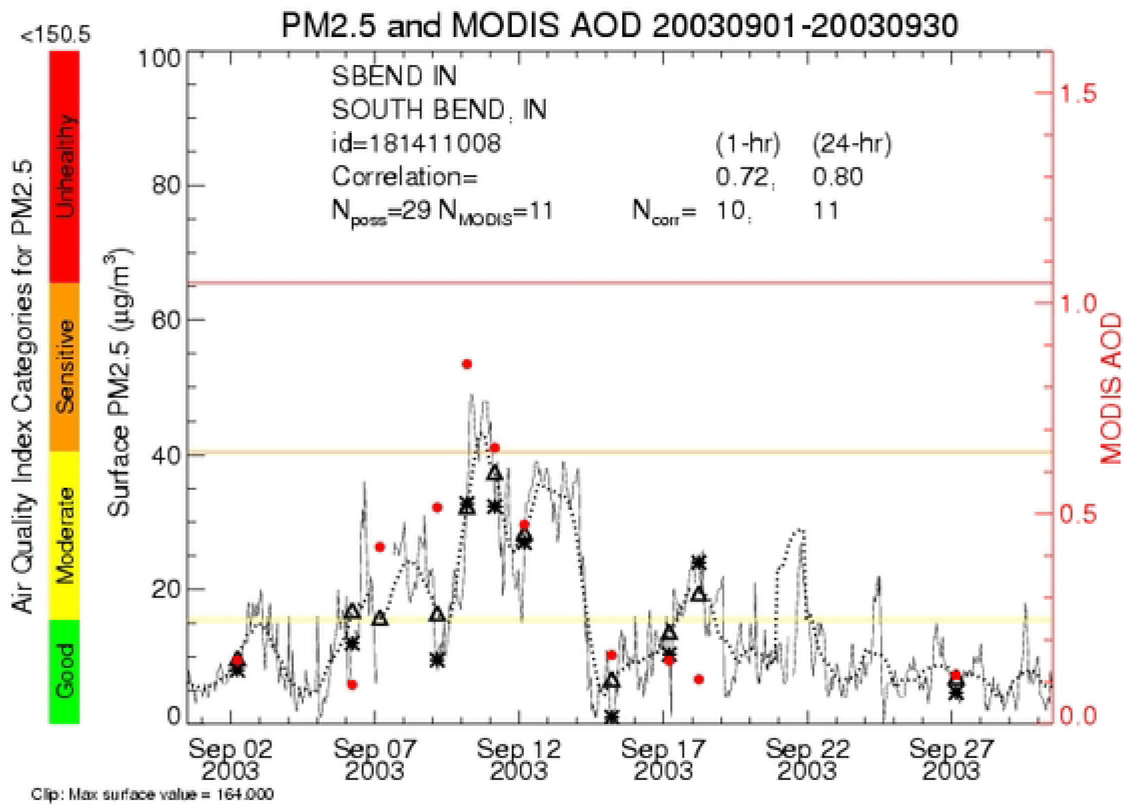


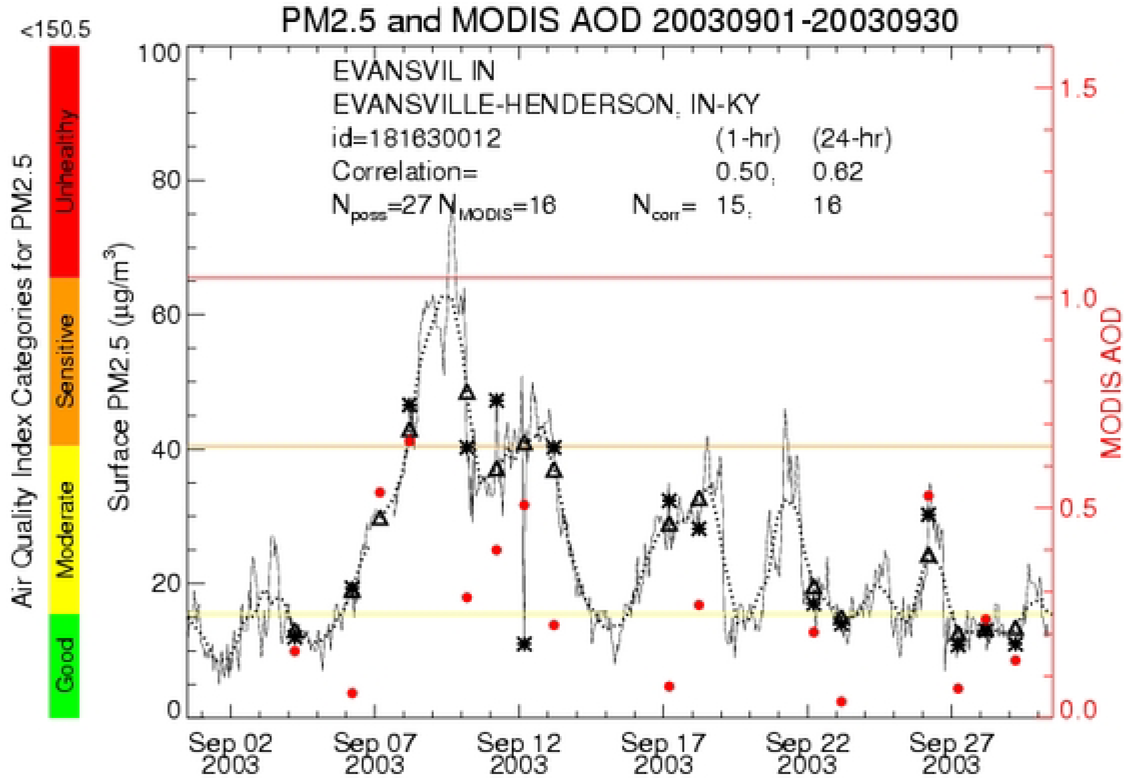
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m3)
MODIS AOD
FTWAYNE IN
FORT WAYNE, IN
id=180030004
(1-hr) (24-hr)
Correlation= 0.88, 0.75
Nposs=27 NMODIS=10 Ncorr= 9, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

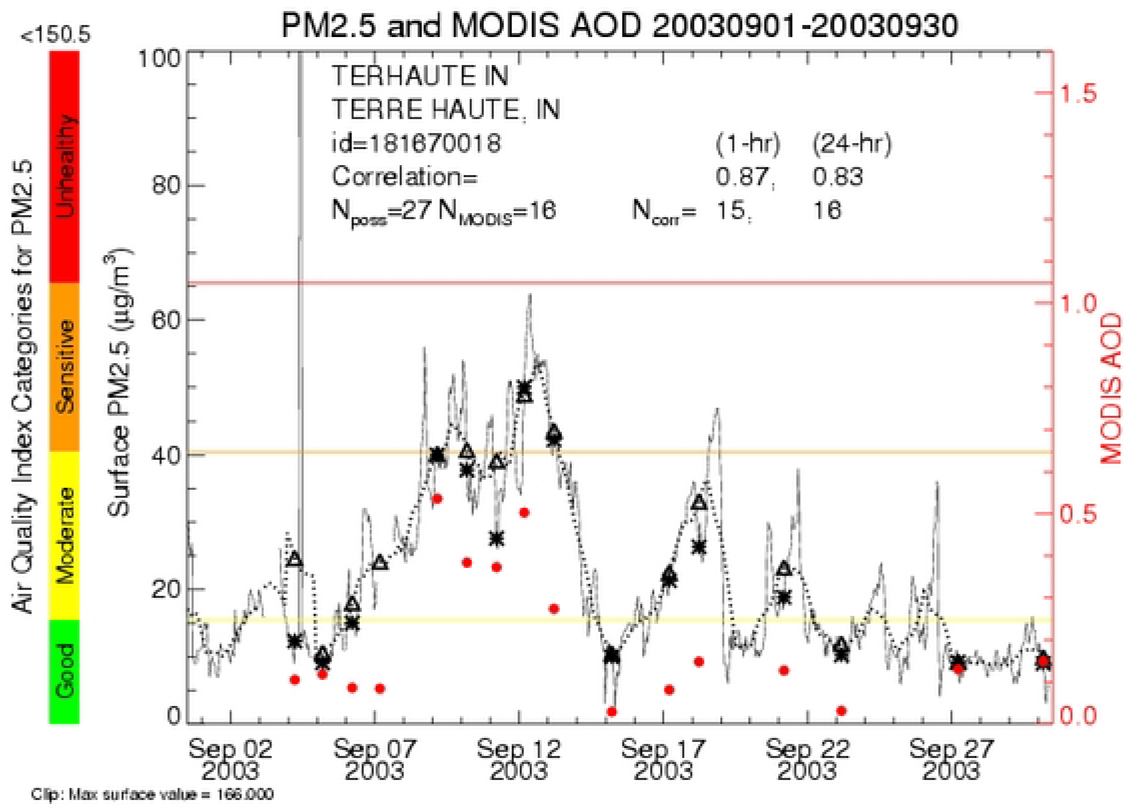


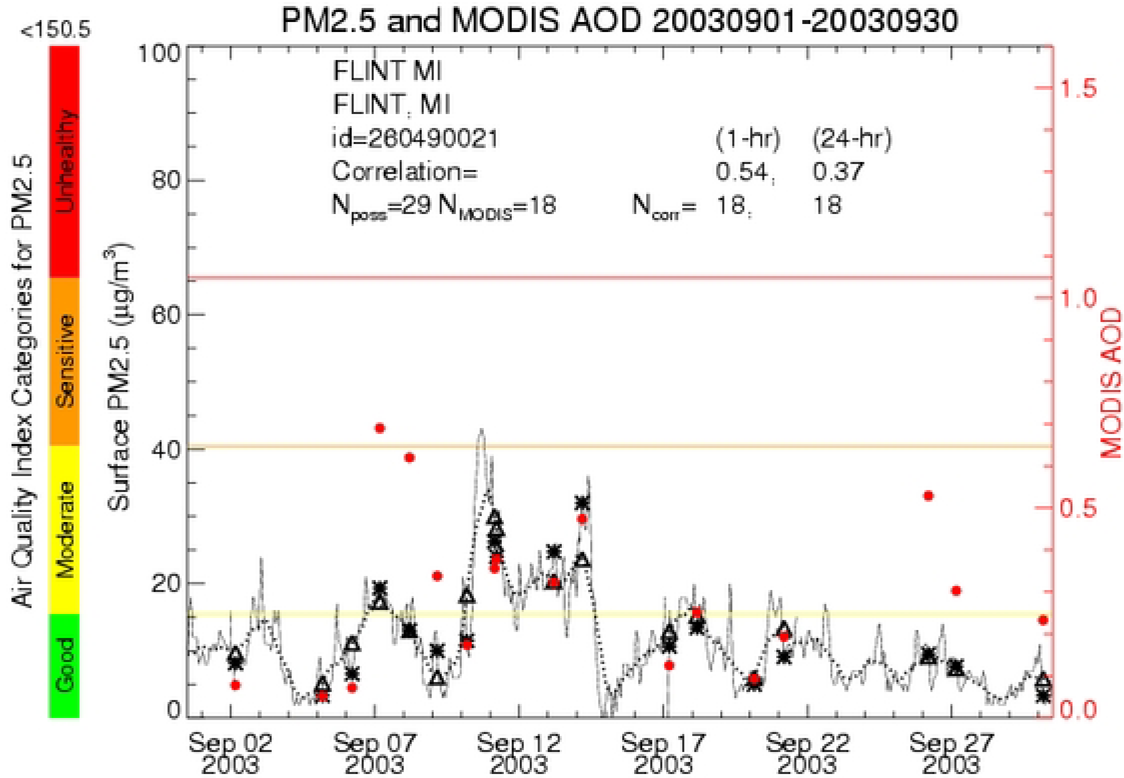
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m3)
MODIS AOD
GARYIITR IN
GARY, IN
id=180890022
(1-hr) (24-hr)
Correlation= 0.74, 0.74
Nposs=28 NMODIS=15 Ncorr= 12, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

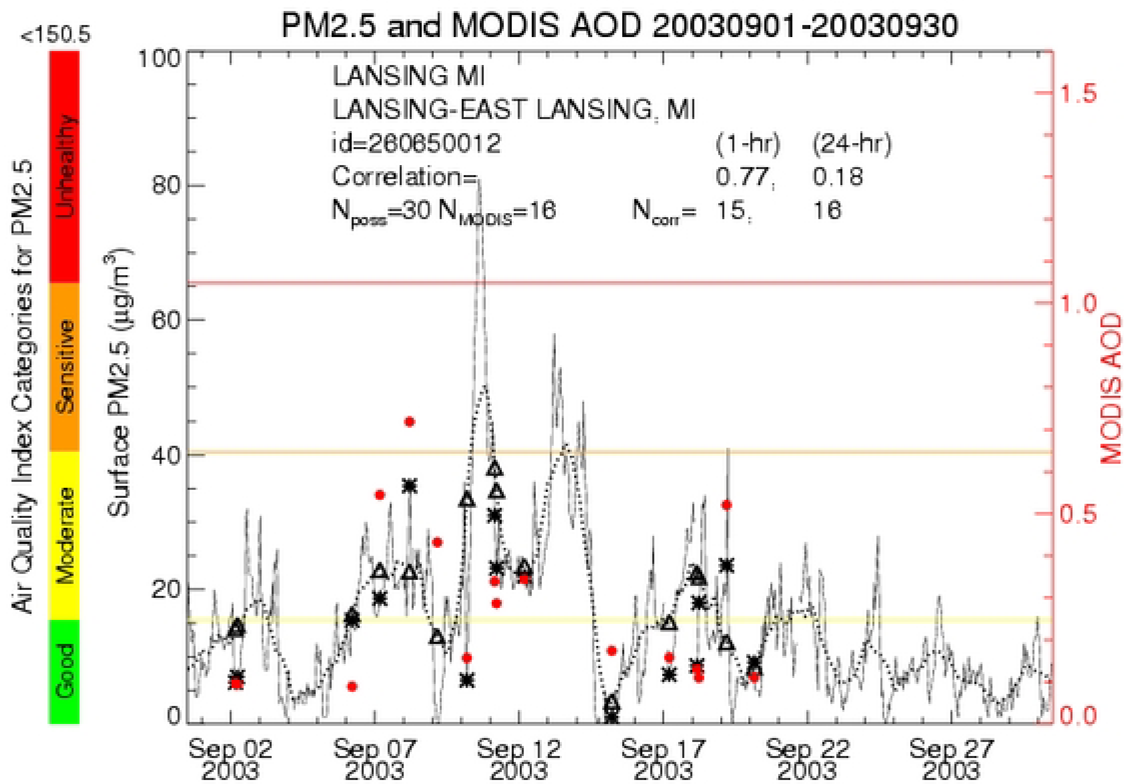

PM2.5 and MODIS AOD 20030901-20030930
Washington Park IN
INDIANAPOLIS, IN
id=180970078
(1-hr) (24-hr)
Correlation= 0.52; 0.60
N_poss=26 N_MODIS=14 N_corr= 14; 14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

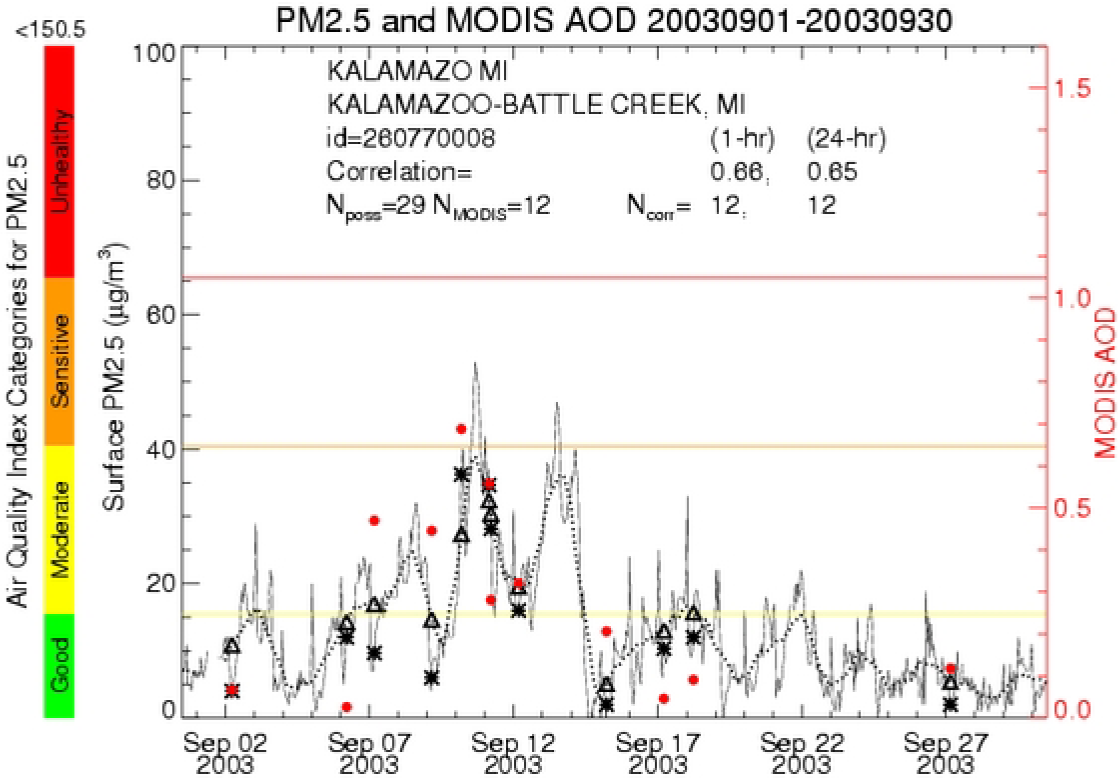

PM2.5 and MODIS AOD 20030901-20030930
SBEND IN
SOUTH BEND, IN
id=181411008
(1-hr) (24-hr)
Correlation= 0.72; 0.80
N_poss=29 N_MODIS=11 N_corr= 10; 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 164.000

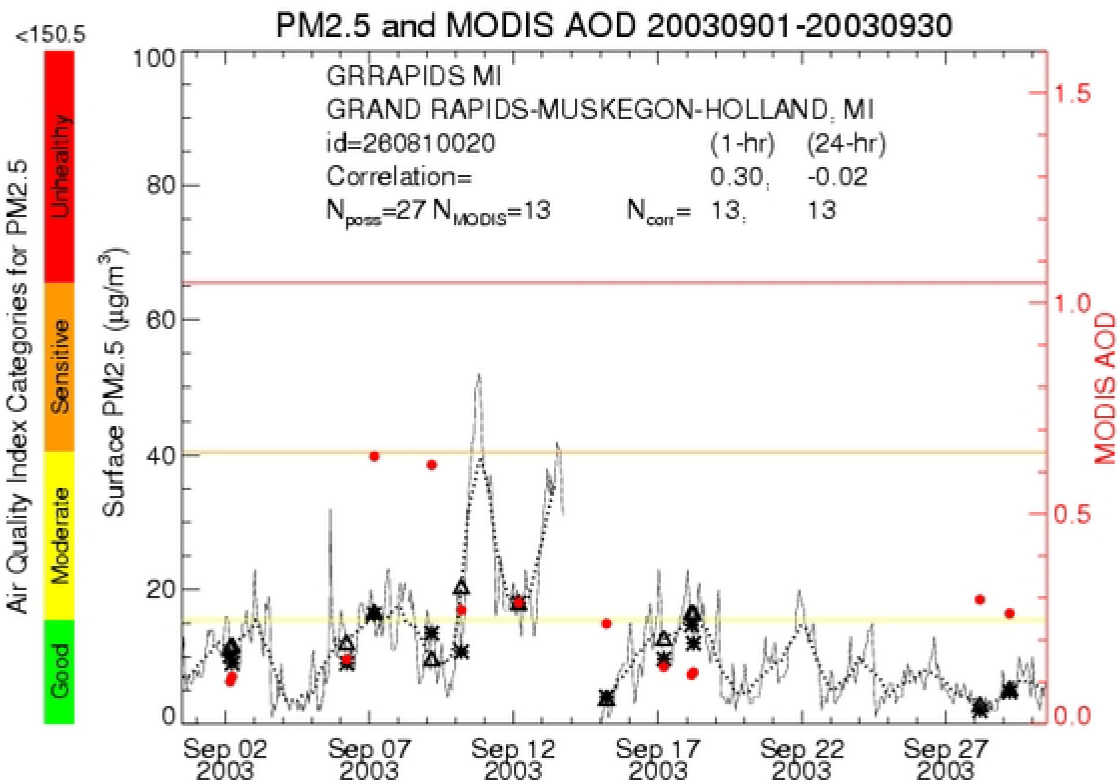

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
EVANSVIL IN
EVANSVILLE-HENDERSON, IN-KY
id=181630012 (1-hr) (24-hr)
Correlation= 0.50, 0.62
N_poss=27 N_MODIS=16 N_corr= 15, 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

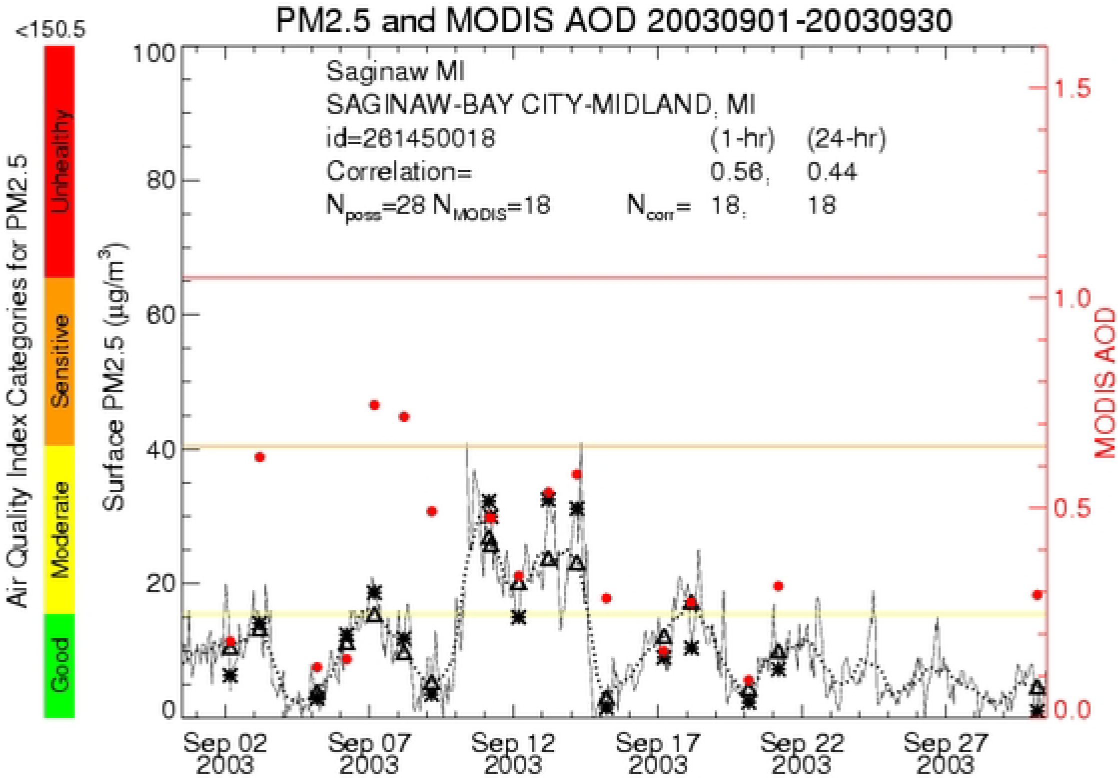

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
TERHAUTE IN
TERRE HAUTE, IN
id=181670018 (1-hr) (24-hr)
Correlation= 0.87, 0.83
N_poss=27 N_MODIS=16 N_corr= 15, 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 166.000

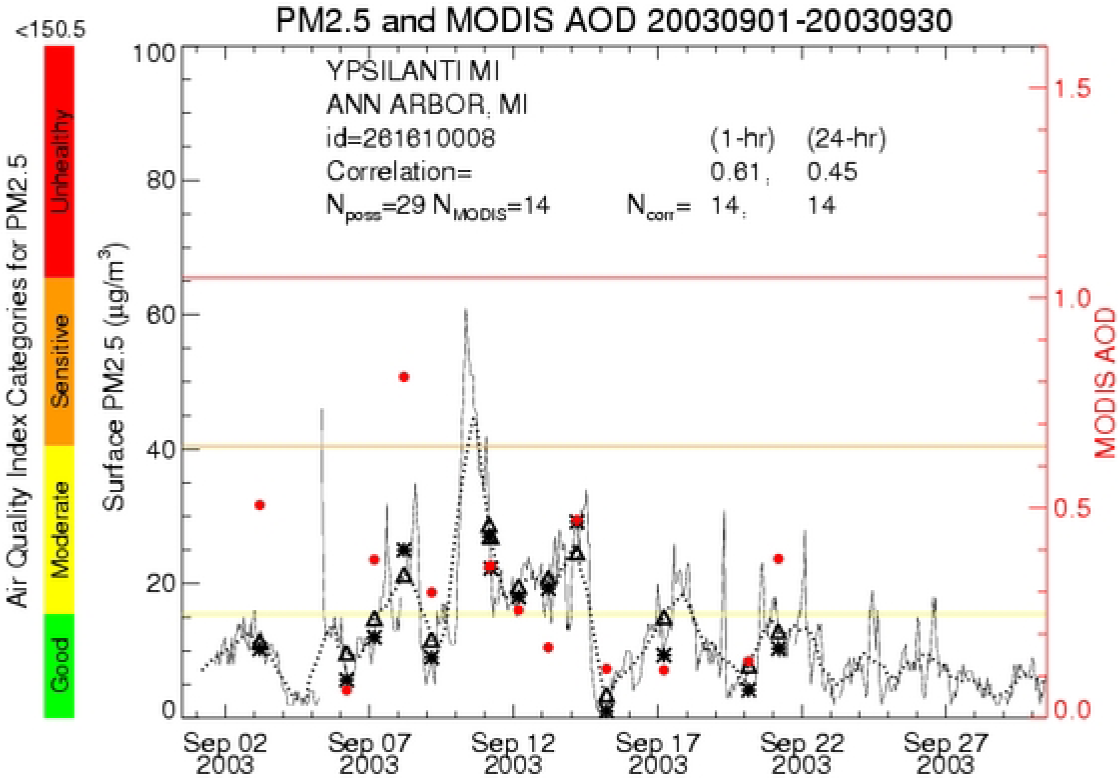

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
FLINT MI
FLINT, MI
id=260490021 (1-hr) (24-hr)
Correlation= 0.54; 0.37
N_{poss}=29 N_{MODIS}=18 N_{corr}= 18; 18
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

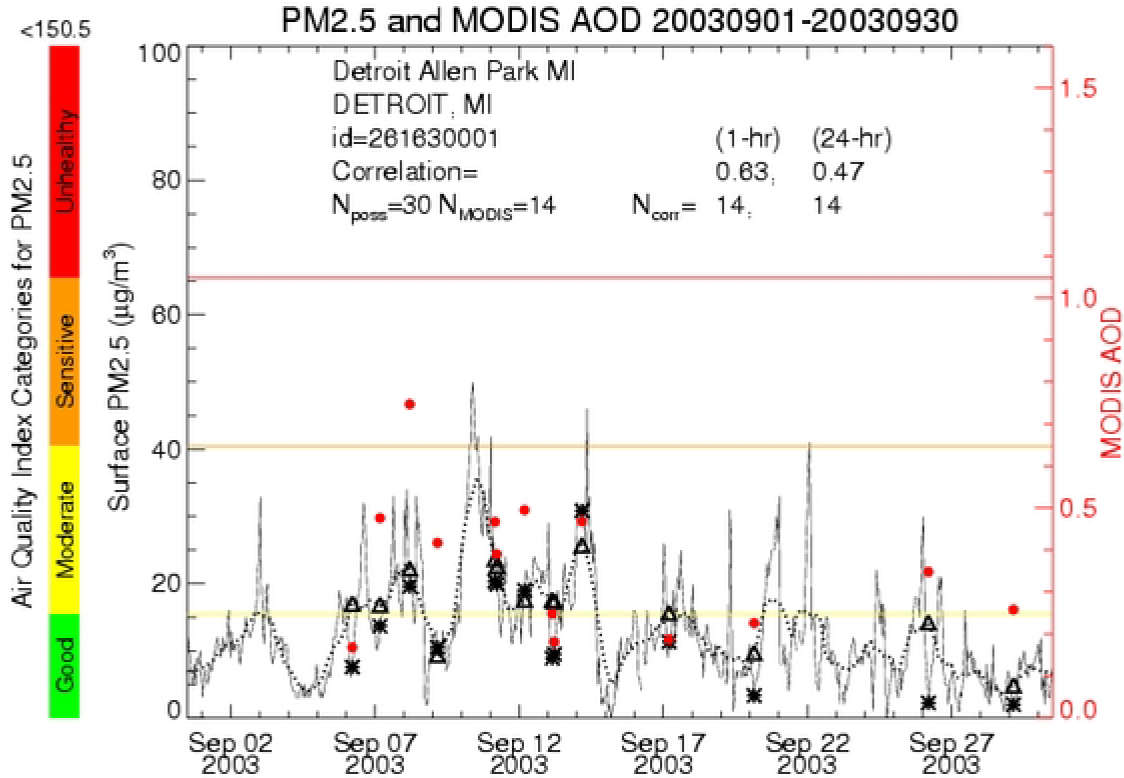

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
LANSING MI
LANSING-EAST LANSING, MI
id=260650012 (1-hr) (24-hr)
Correlation= 0.77; 0.18
N_{poss}=30 N_{MODIS}=16 N_{corr}= 15; 16
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
KALAMAZO MI
KALAMAZOO-BATTLE CREEK, MI
id=260770008 (1-hr) (24-hr)
Correlation= 0.66, 0.65
N_{poss}=29 N_{MODIS}=12 N_{corr}= 12, 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

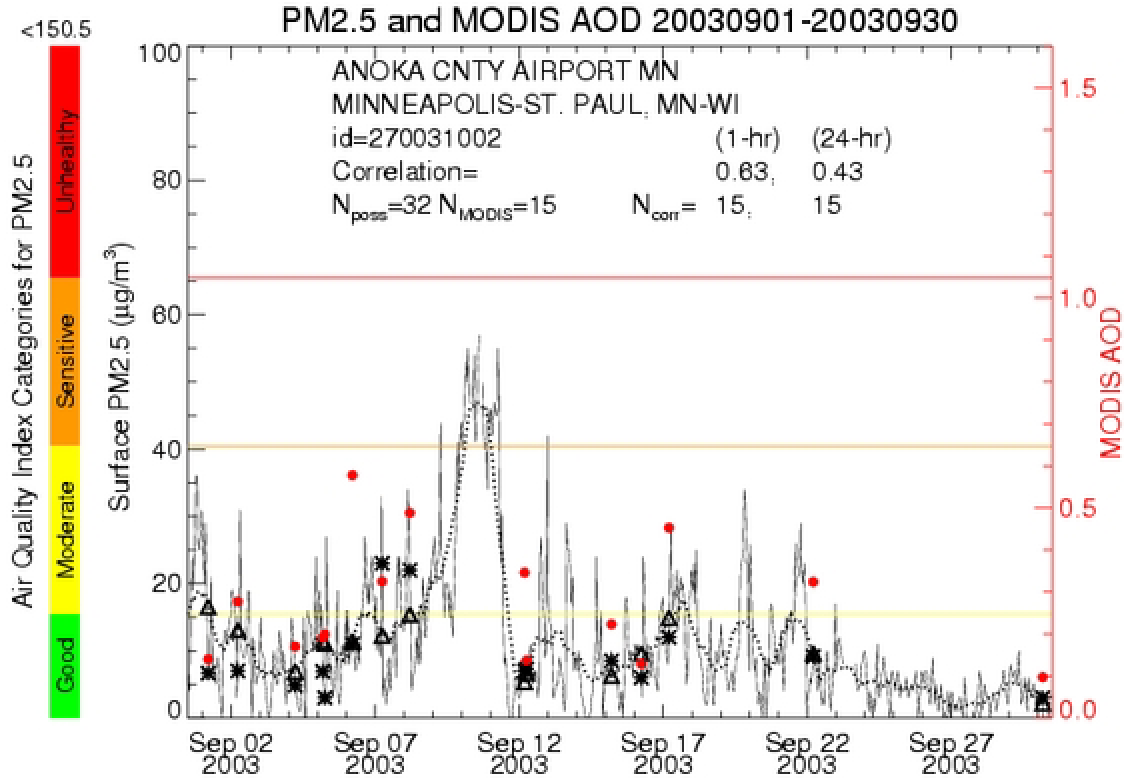

PM2.5 and MODIS AOD 20030901-20030930
<150.5
GRRAPIDS MI
GRAND RAPIDS-MUSKEGON-HOLLAND, MI
id=260810020 (1-hr) (24-hr)
Correlation= 0.30, -0.02
N_{poss}=27 N_{MODIS}=13 N_{corr}= 13, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Saginaw MI
SAGINAW-BAY CITY-MIDLAND, MI
id=261450018 (1-hr) (24-hr)
Correlation= 0.56, 0.44
N_{poss}=28 N_{MODIS}=18 N_{corr}= 18, 18
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

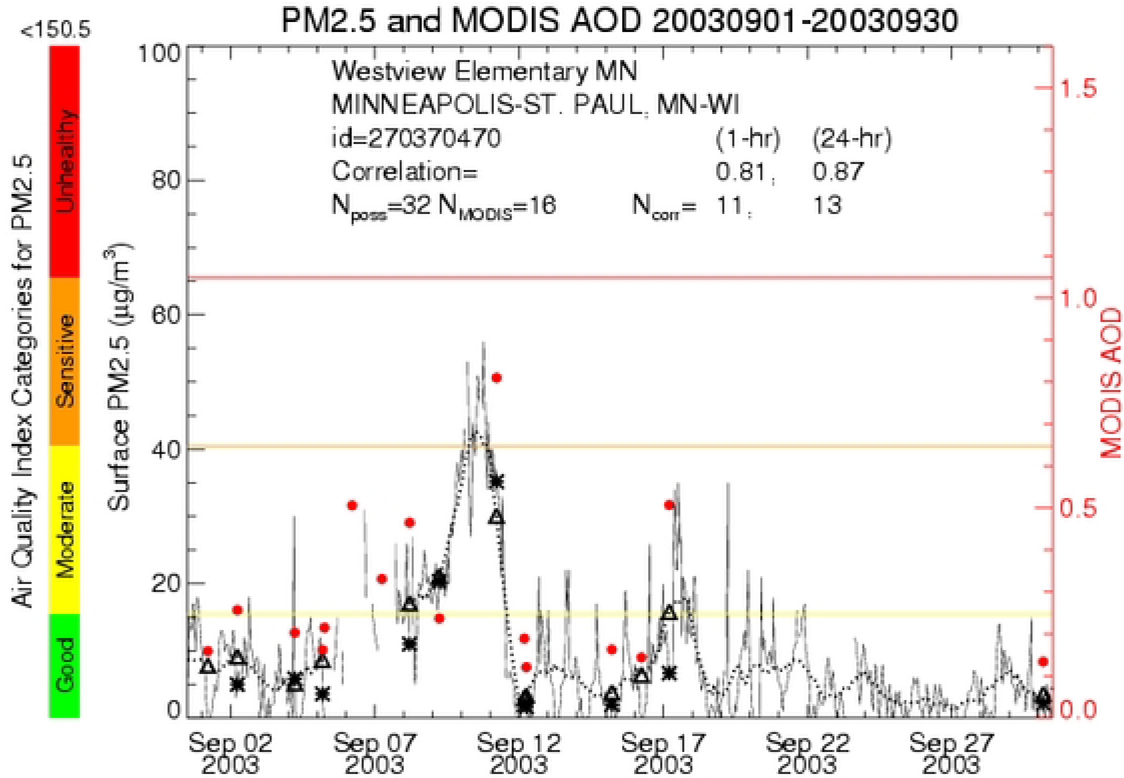

PM2.5 and MODIS AOD 20030901-20030930
YPSILANTI MI
ANN ARBOR, MI
id=261610008 (1-hr) (24-hr)
Correlation= 0.61, 0.45
N_{poss}=29 N_{MODIS}=14 N_{corr}= 14, 14
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

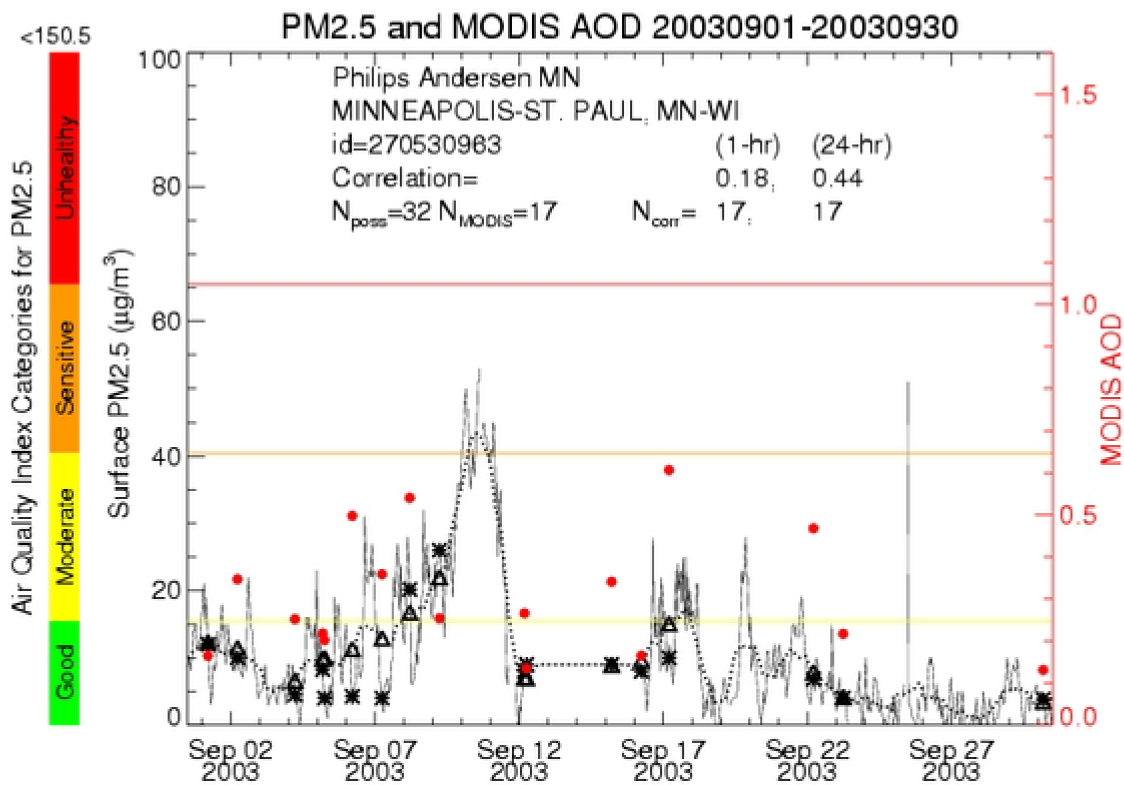


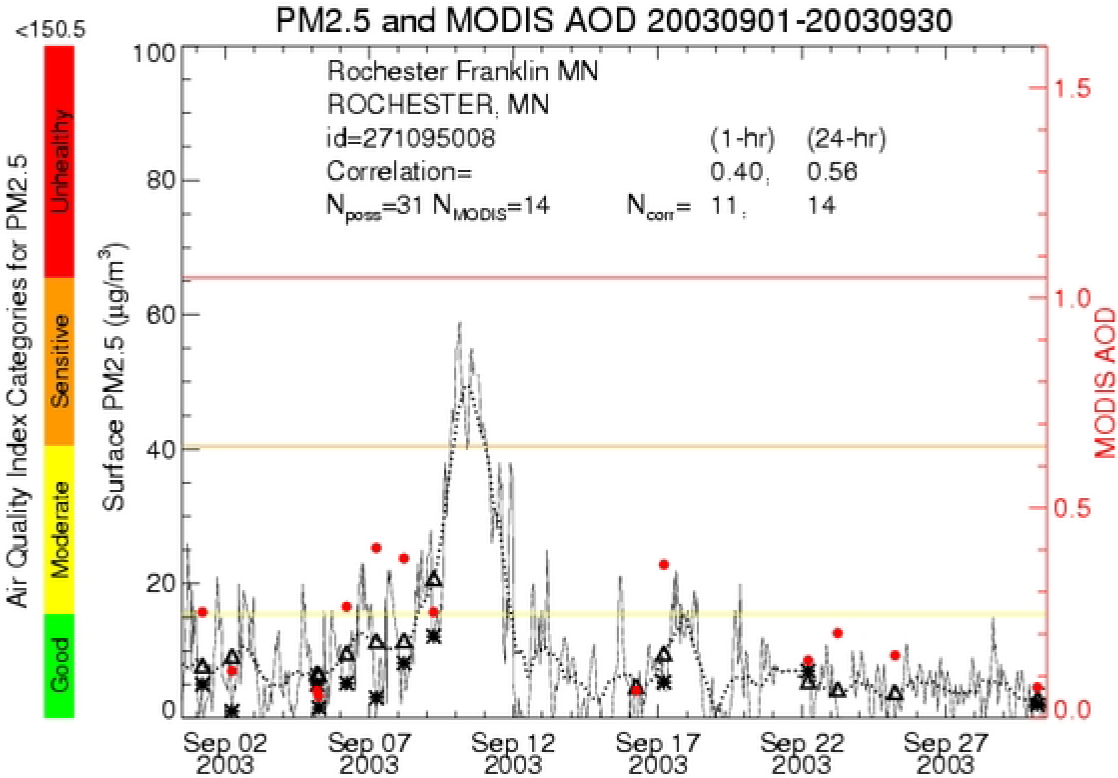
PM2.5 and MODIS AOD 20030901-20030930
Detroit Allen Park MI
DETROIT, MI
id=261630001
(1-hr) (24-hr)
Correlation= 0.63; 0.47
N_{poss}=30 N_{MODIS}=14 N_{corr}= 14; 14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



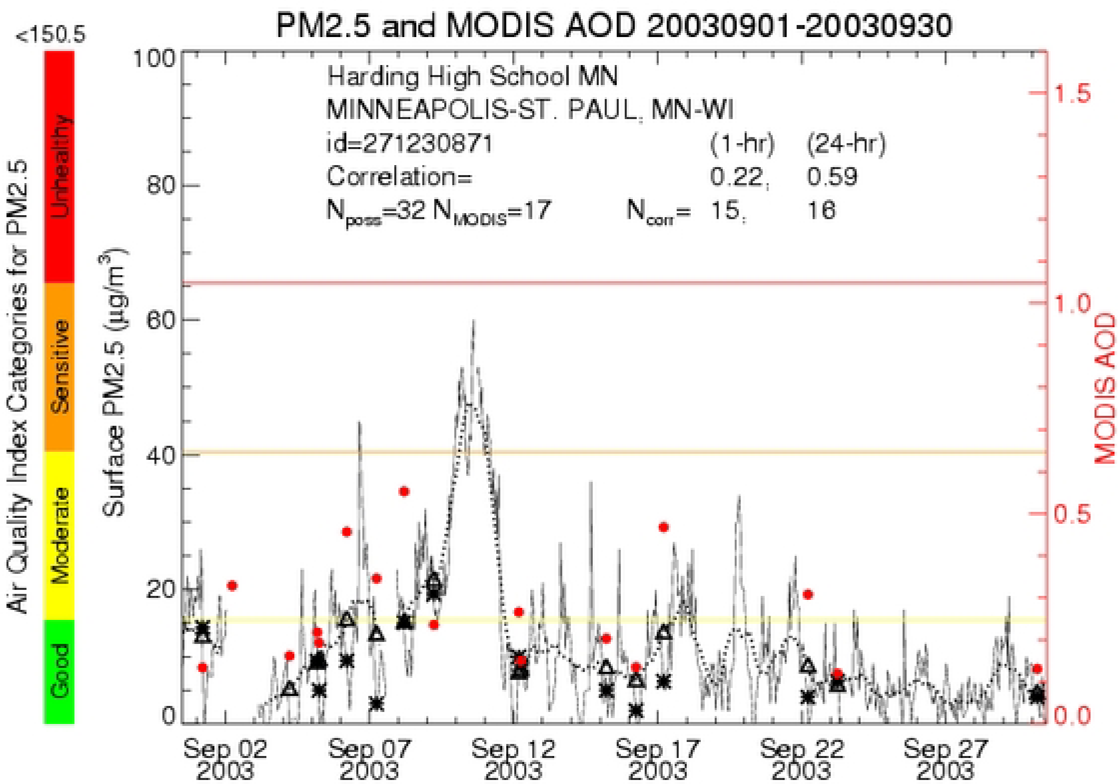
PM2.5 and MODIS AOD 20030901-20030930
ANOKA CNTY AIRPORT MN
MINNEAPOLIS-ST. PAUL, MN-WI
id=270031002
(1-hr) (24-hr)
Correlation= 0.63; 0.43
N_{poss}=32 N_{MODIS}=15 N_{corr}= 15; 15
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Westview Elementary MN
MINNEAPOLIS-ST. PAUL, MN-WI
id=270370470 (1-hr) (24-hr)
Correlation= 0.81, 0.87
N poss=32 N MODIS=16 N corr= 11, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

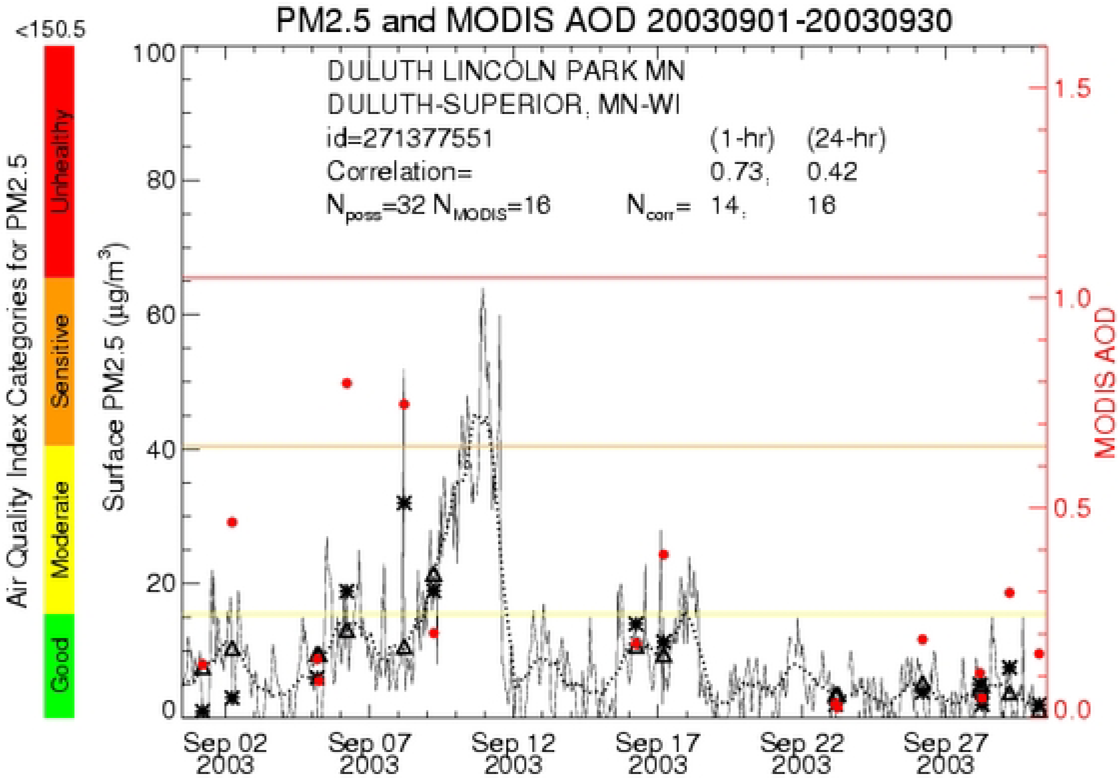

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Philips Andersen MN
MINNEAPOLIS-ST. PAUL, MN-WI
id=270530963 (1-hr) (24-hr)
Correlation= 0.18, 0.44
N poss=32 N MODIS=17 N corr= 17, 17
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

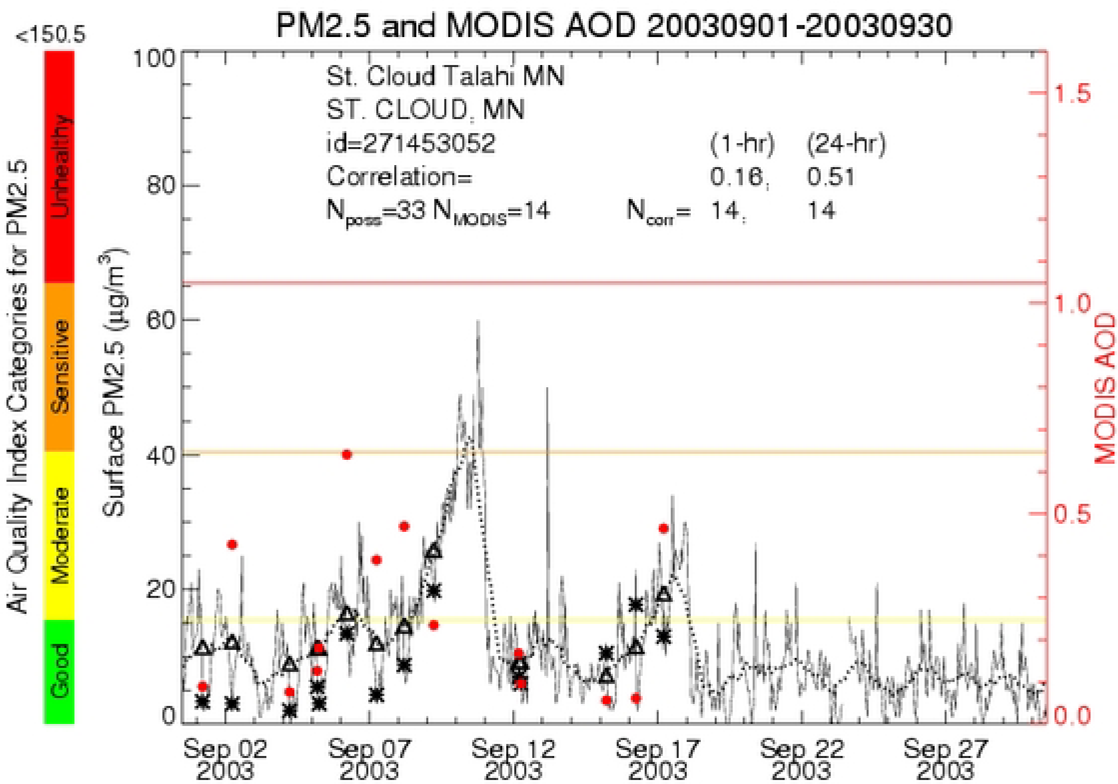


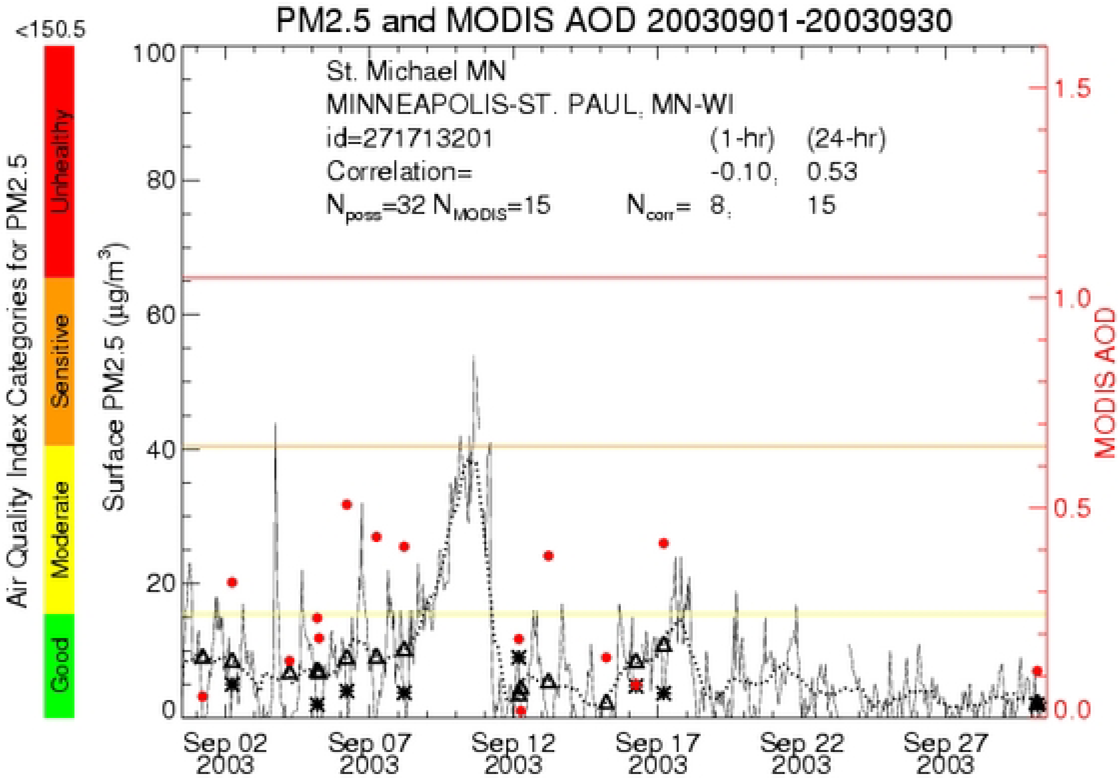
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Rochester Franklin MN
ROCHESTER, MN
id=271095008 (1-hr) (24-hr)
Correlation= 0.40, 0.56
N_poss=31 N_MODIS=14 N_corr= 11, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

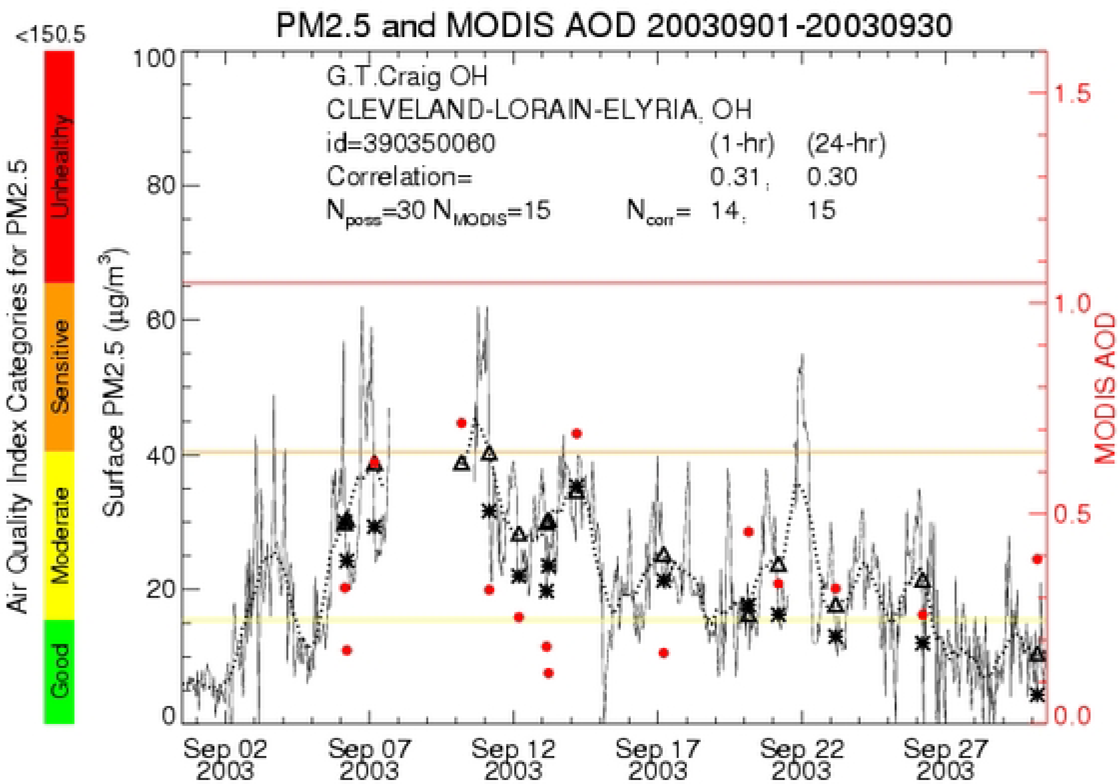


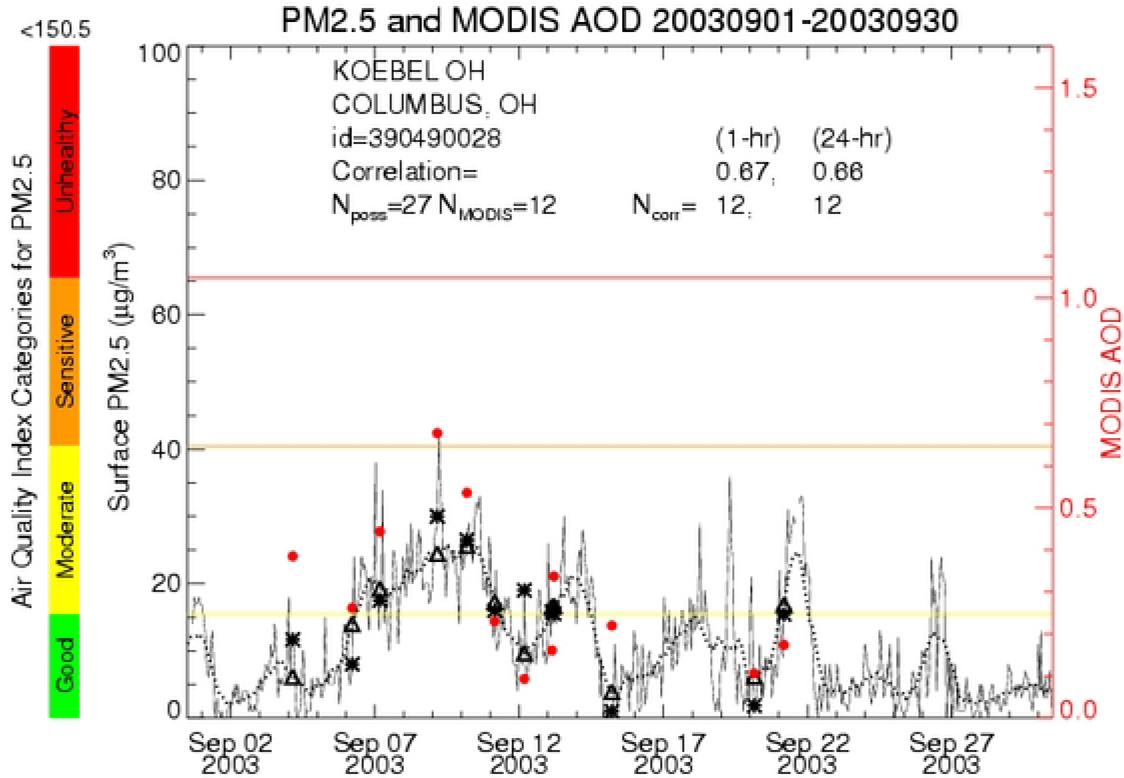
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Harding High School MN
MINNEAPOLIS-ST. PAUL, MN-WI
id=271230871 (1-hr) (24-hr)
Correlation= 0.22, 0.59
N_poss=32 N_MODIS=17 N_corr= 15, 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

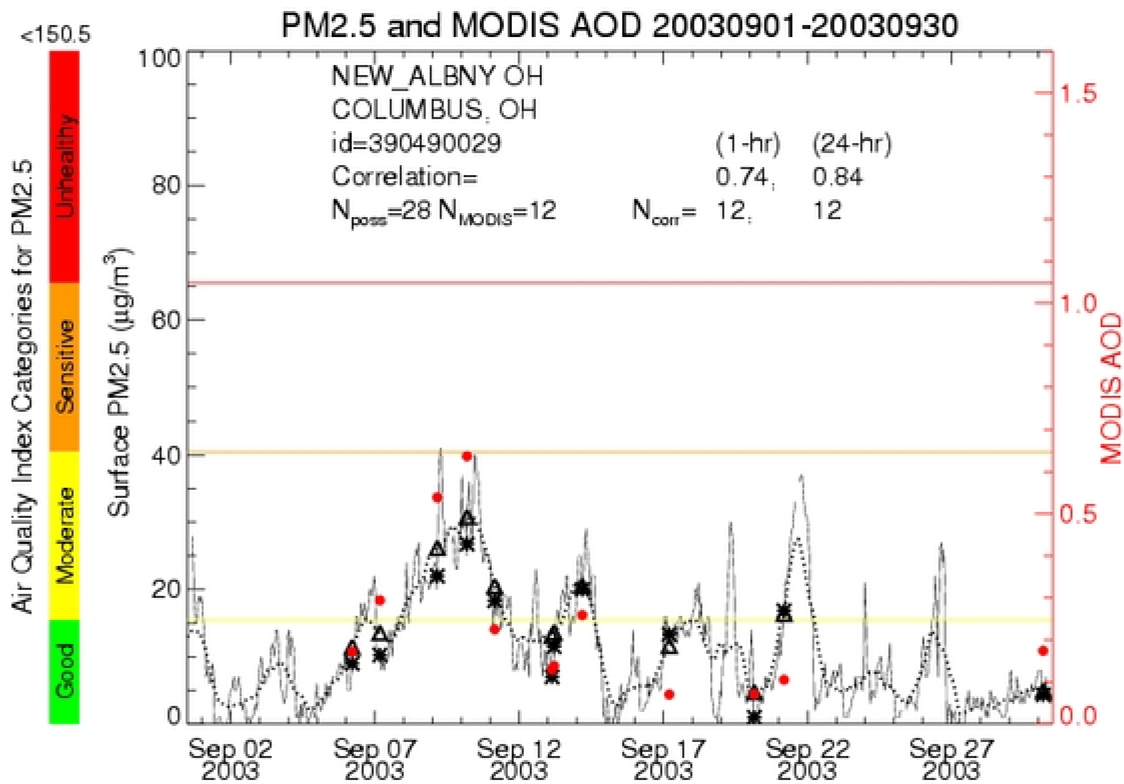

PM2.5 and MODIS AOD 20030901-20030930
DULUTH LINCOLN PARK MN
DULUTH-SUPERIOR, MN-WI
id=271377551 (1-hr) (24-hr)
Correlation= 0.73, 0.42
N_{poss}=32 N_{MODIS}=16 N_{corr}= 14, 16
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

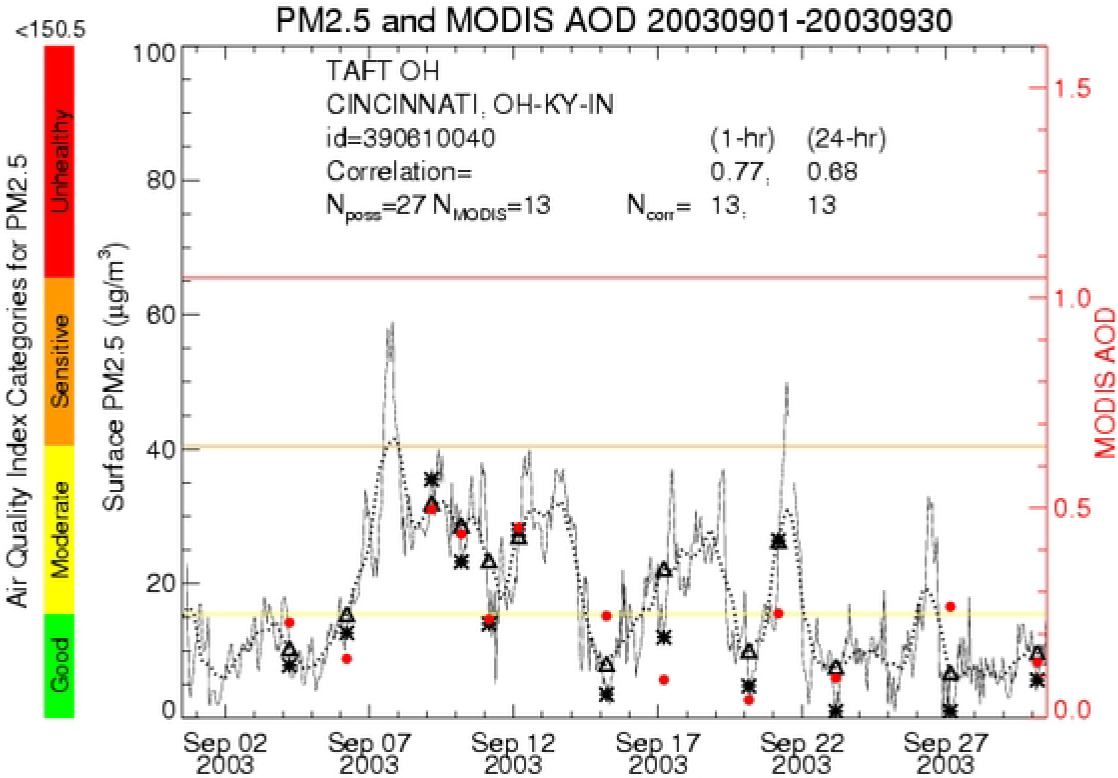

PM2.5 and MODIS AOD 20030901-20030930
St. Cloud Talahi MN
ST. CLOUD, MN
id=271453052 (1-hr) (24-hr)
Correlation= 0.16, 0.51
N_{poss}=33 N_{MODIS}=14 N_{corr}= 14, 14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

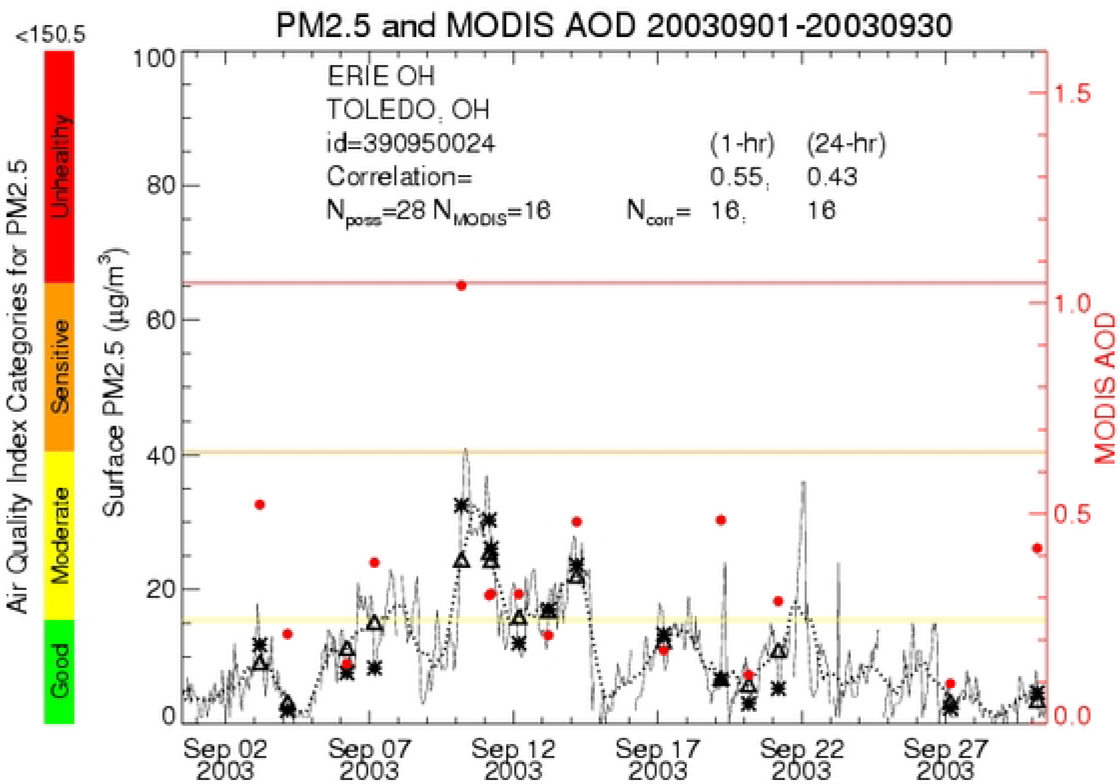

PM2.5 and MODIS AOD 20030901-20030930
<150.5
St. Michael MN
MINNEAPOLIS-ST. PAUL, MN-WI
id=271713201 (1-hr) (24-hr)
Correlation= -0.10, 0.53
Nposs=32 NMODIS=15 Ncorr= 8, 15
Air Quality Index Categories for PM2.5
Good
Moderate
Sensitive
Unhealthy
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

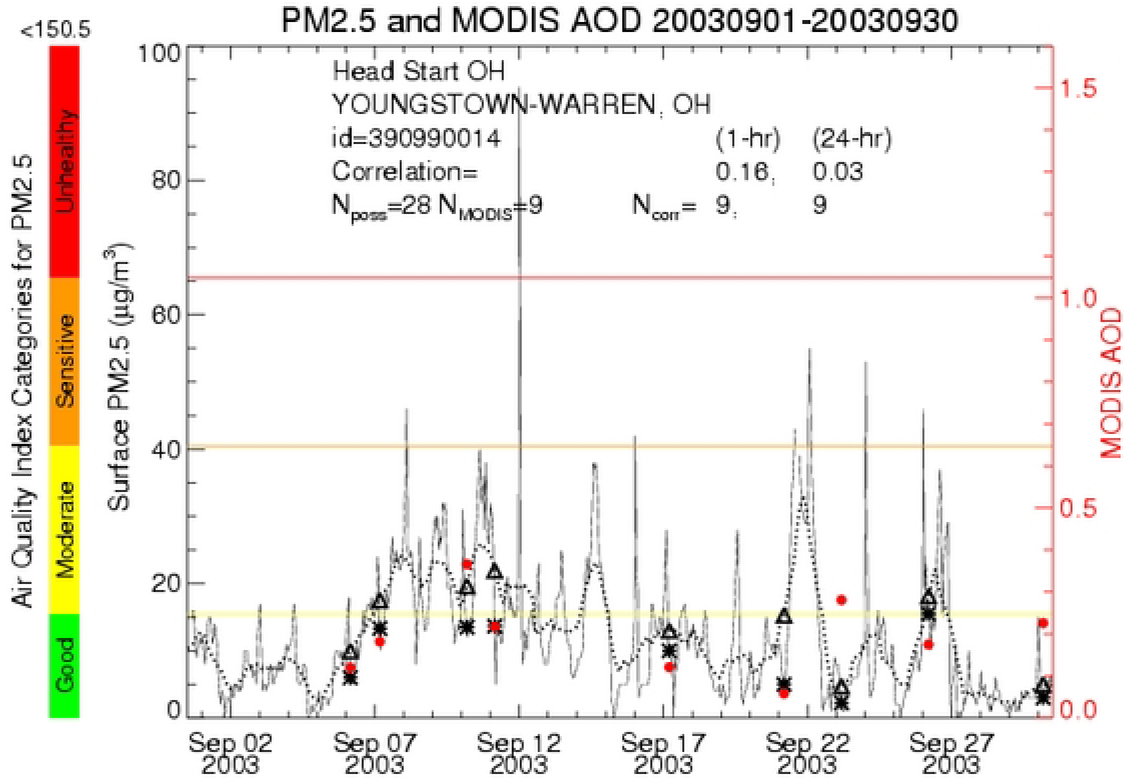

PM2.5 and MODIS AOD 20030901-20030930
<150.5
G.T.Craig OH
CLEVELAND-LORAIN-ELYRIA, OH
id=390350060 (1-hr) (24-hr)
Correlation= 0.31, 0.30
Nposs=30 NMODIS=15 Ncorr= 14, 15
Air Quality Index Categories for PM2.5
Good
Moderate
Sensitive
Unhealthy
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

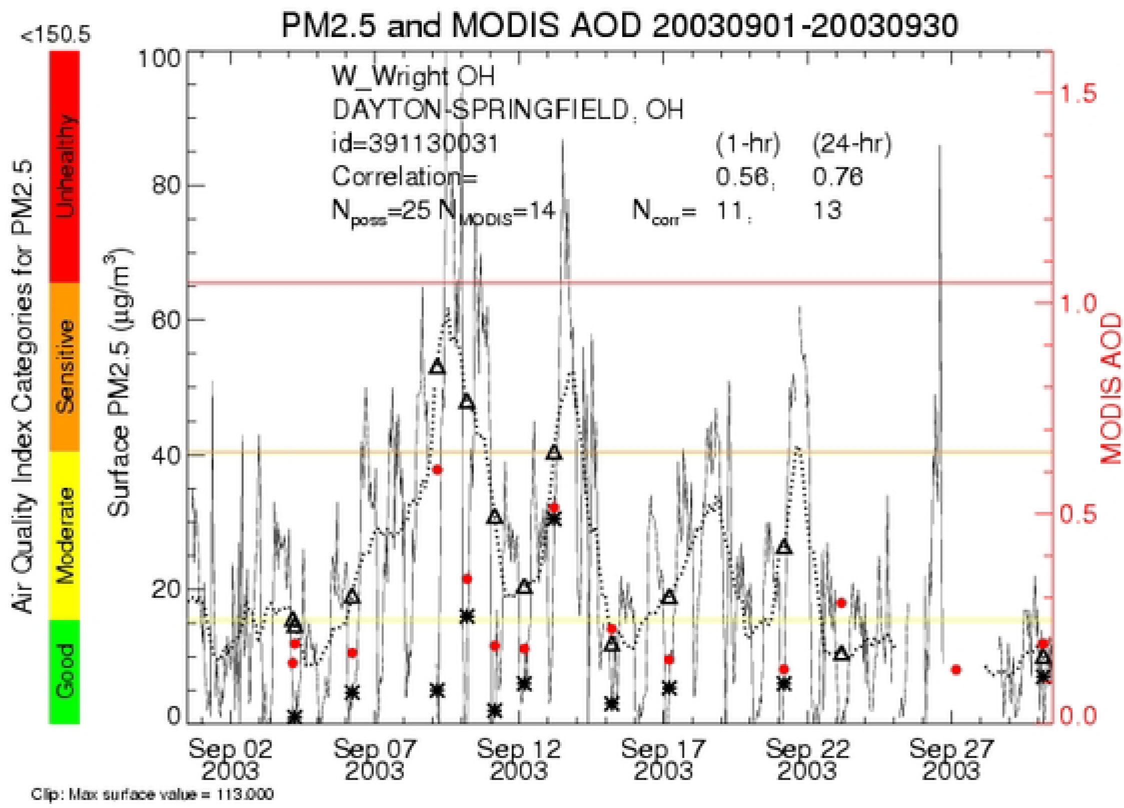

PM2.5 and MODIS AOD 20030901-20030930
KOEBEL OH
COLUMBUS, OH
id=390490028
(1-hr) (24-hr)
Correlation= 0.67; 0.66
N_poss=27 N_MODIS=12 N_corr= 12; 12
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

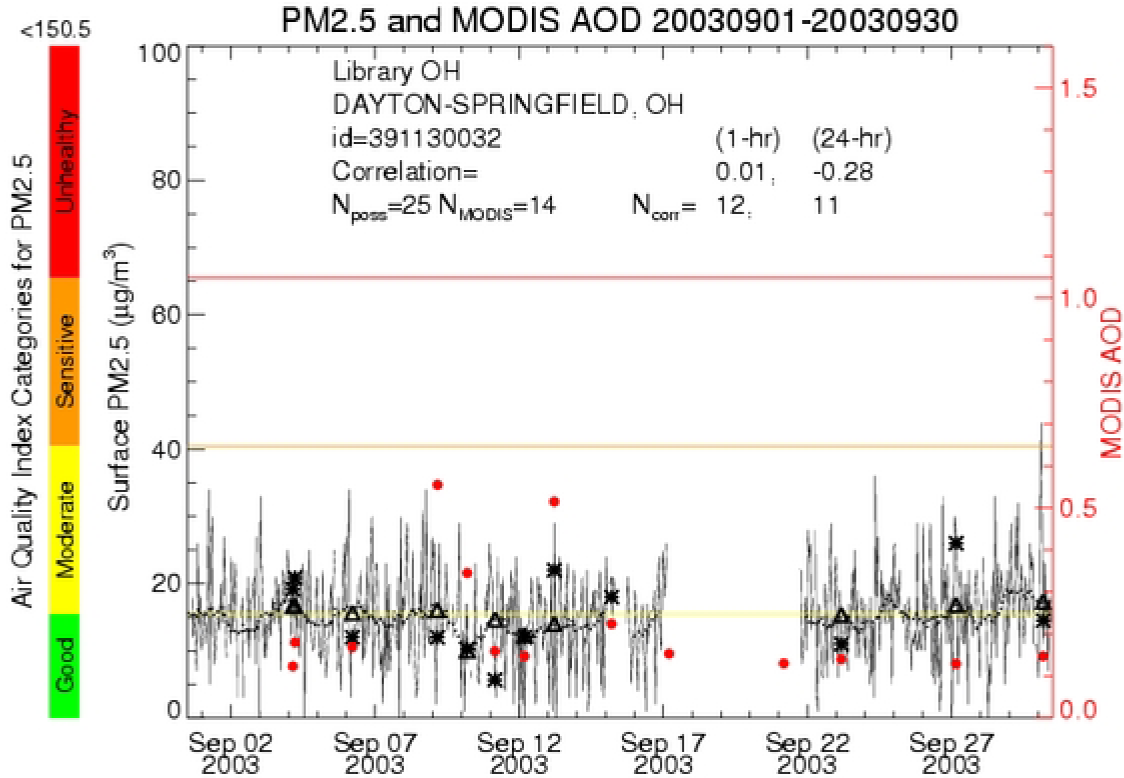

PM2.5 and MODIS AOD 20030901-20030930
NEW_ALBNY OH
COLUMBUS, OH
id=390490029
(1-hr) (24-hr)
Correlation= 0.74; 0.84
N_poss=28 N_MODIS=12 N_corr= 12; 12
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
TAFT OH
CINCINNATI, OH-KY-IN
id=390610040 (1-hr) (24-hr)
Correlation= 0.77, 0.68
Nposs=27 NMODIS=13 Ncorr= 13, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

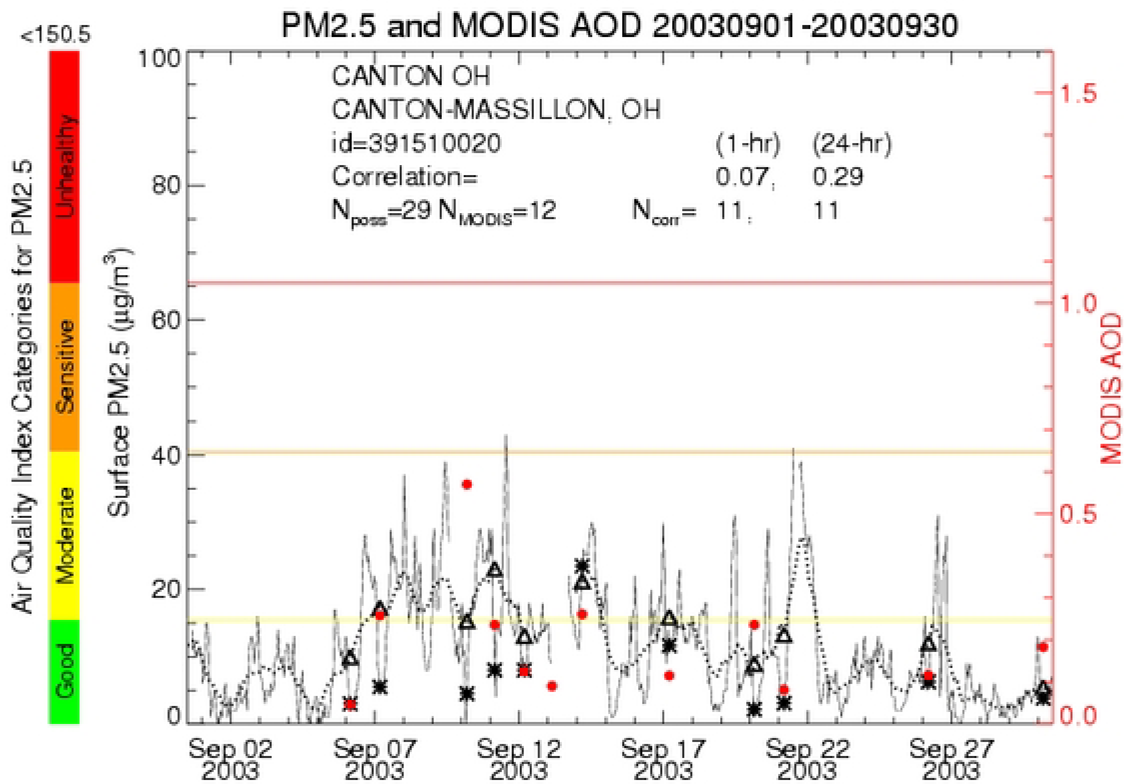

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
ERIE OH
TOLEDO, OH
id=390950024 (1-hr) (24-hr)
Correlation= 0.55, 0.43
Nposs=28 NMODIS=16 Ncorr= 16, 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Head Start OH
YOUNGSTOWN-WARREN, OH
id=390990014 (1-hr) (24-hr)
Correlation= 0.16, 0.03
N_poss=28 N_MODIS=9 N_corr= 9, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

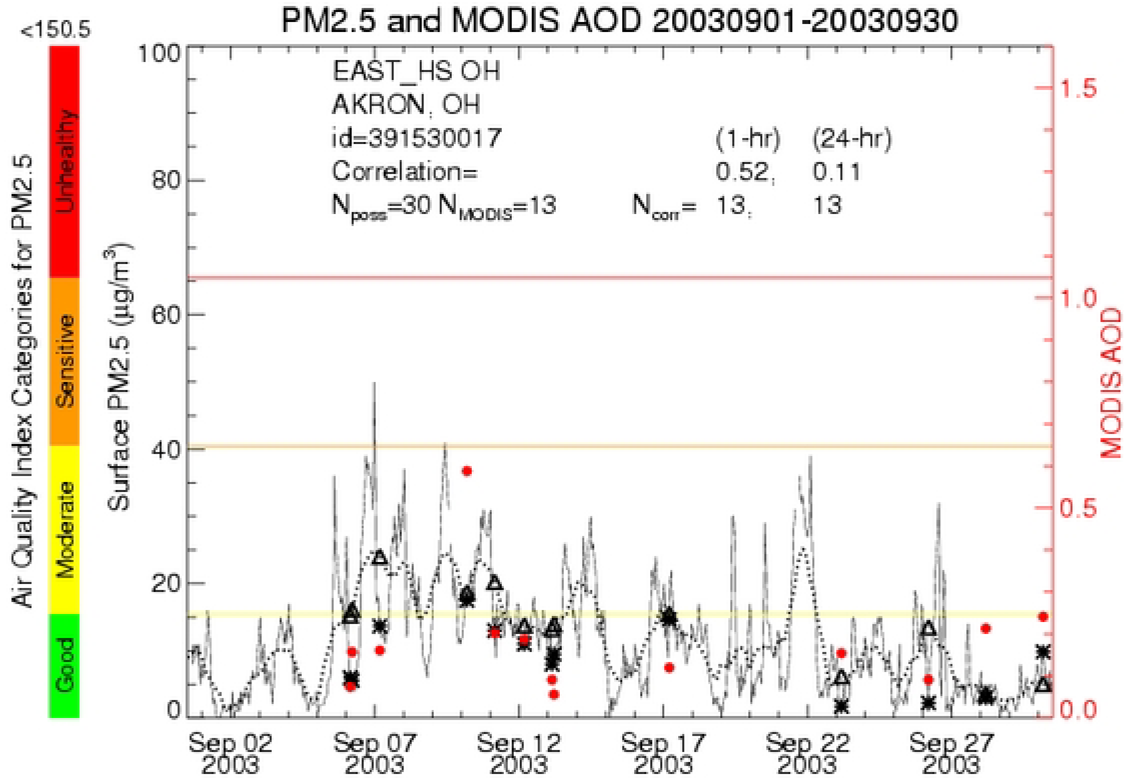

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
W_Wright OH
DAYTON-SPRINGFIELD, OH
id=391130031 (1-hr) (24-hr)
Correlation= 0.56, 0.76
N_poss=25 N_MODIS=14 N_corr= 11, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 113.000

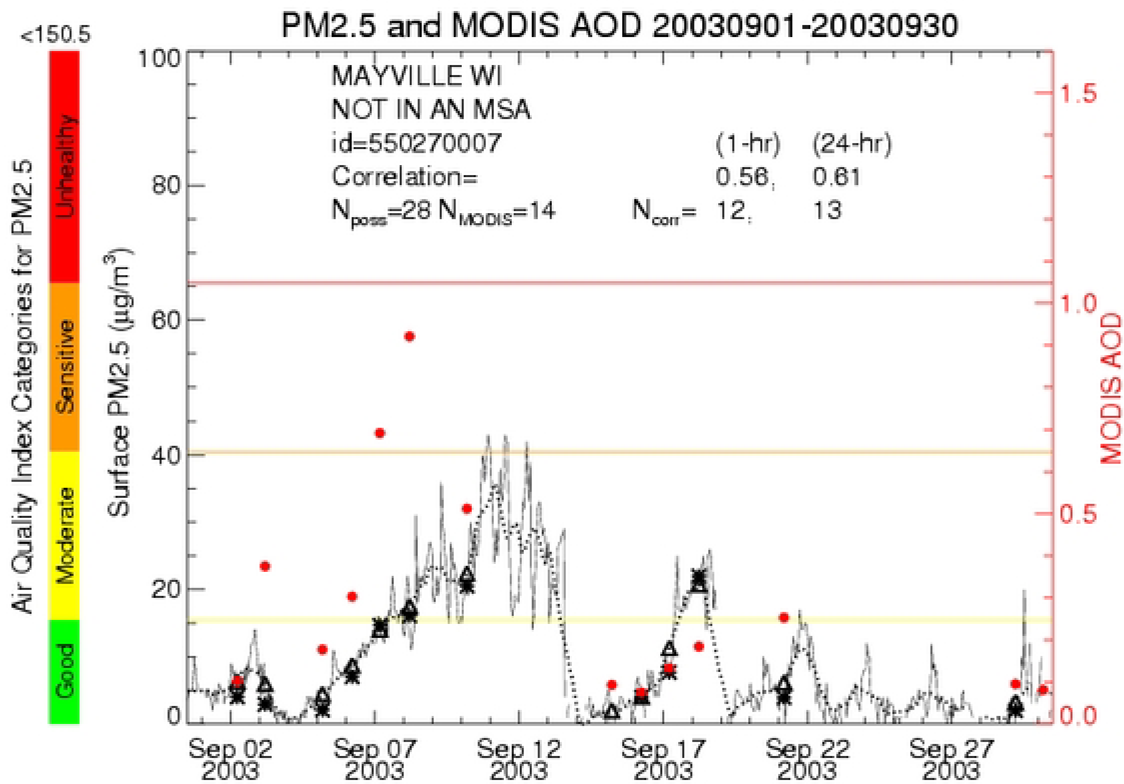


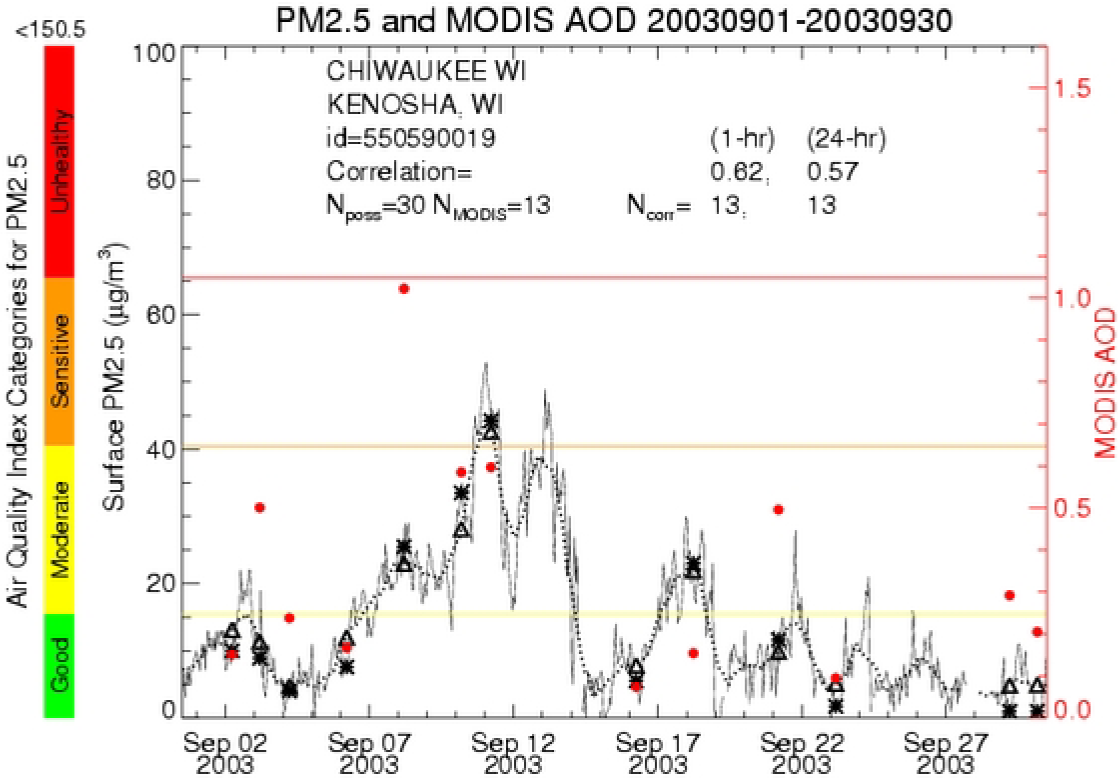
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Library OH
DAYTON-SPRINGFIELD, OH
id=391130032 (1-hr) (24-hr)
Correlation= 0.01, -0.28
Nposs=25 NMODIS=14 Ncorr= 12, 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

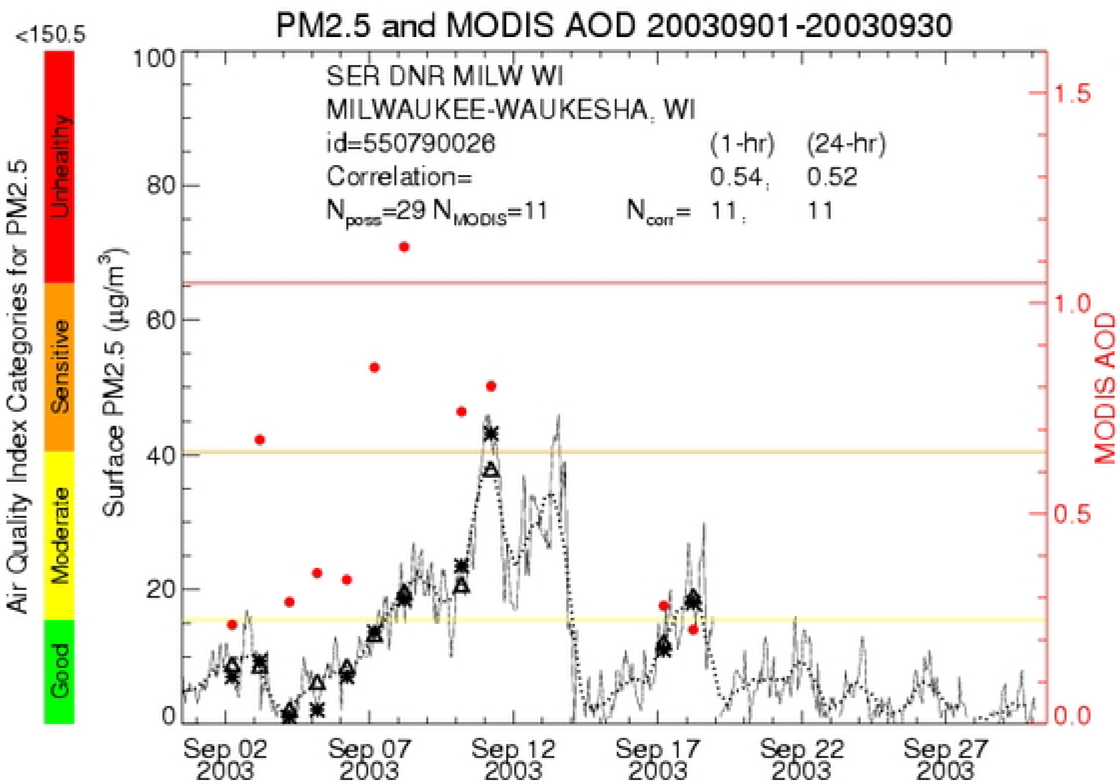


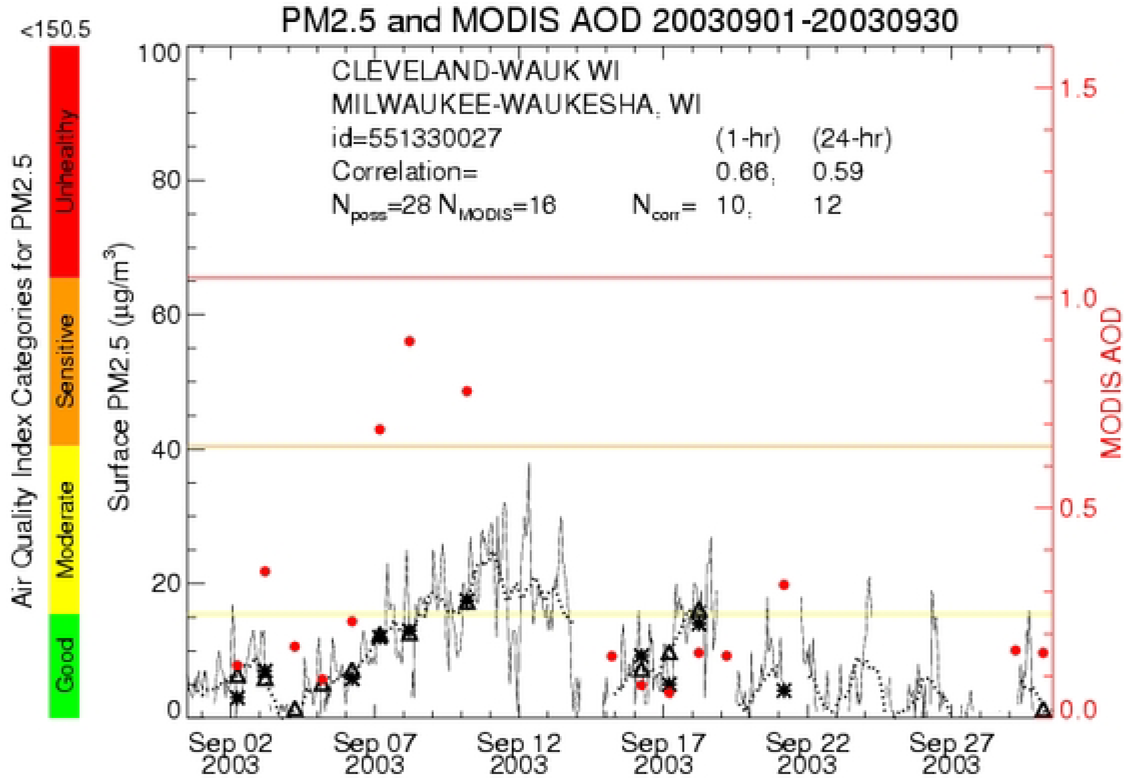
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
CANTON OH
CANTON-MASSILLON, OH
id=391510020 (1-hr) (24-hr)
Correlation= 0.07, 0.29
Nposs=29 NMODIS=12 Ncorr= 11, 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
EAST_HS OH
AKRON, OH
id=391530017
(1-hr) (24-hr)
Correlation= 0.52, 0.11
N_{poss}=30 N_{MODIS}=13 N_{corr}= 13, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
MAYVILLE WI
NOT IN AN MSA
id=550270007
(1-hr) (24-hr)
Correlation= 0.56, 0.61
N_{poss}=28 N_{MODIS}=14 N_{corr}= 12, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

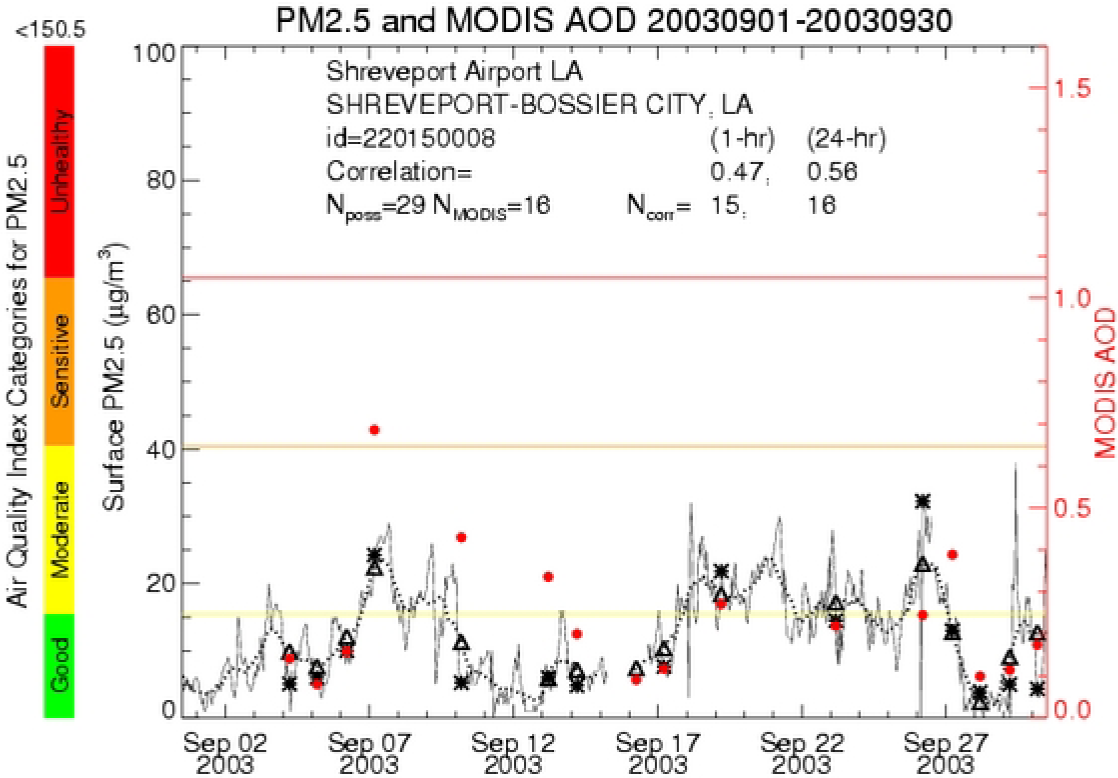

PM2.5 and MODIS AOD 20030901-20030930
<150.5
CHIWAUKEE WI
KENOSHA, WI
id=550590019
(1-hr) (24-hr)
Correlation= 0.62, 0.57
N_poss=30 N_MODIS=13 N_corr= 13, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

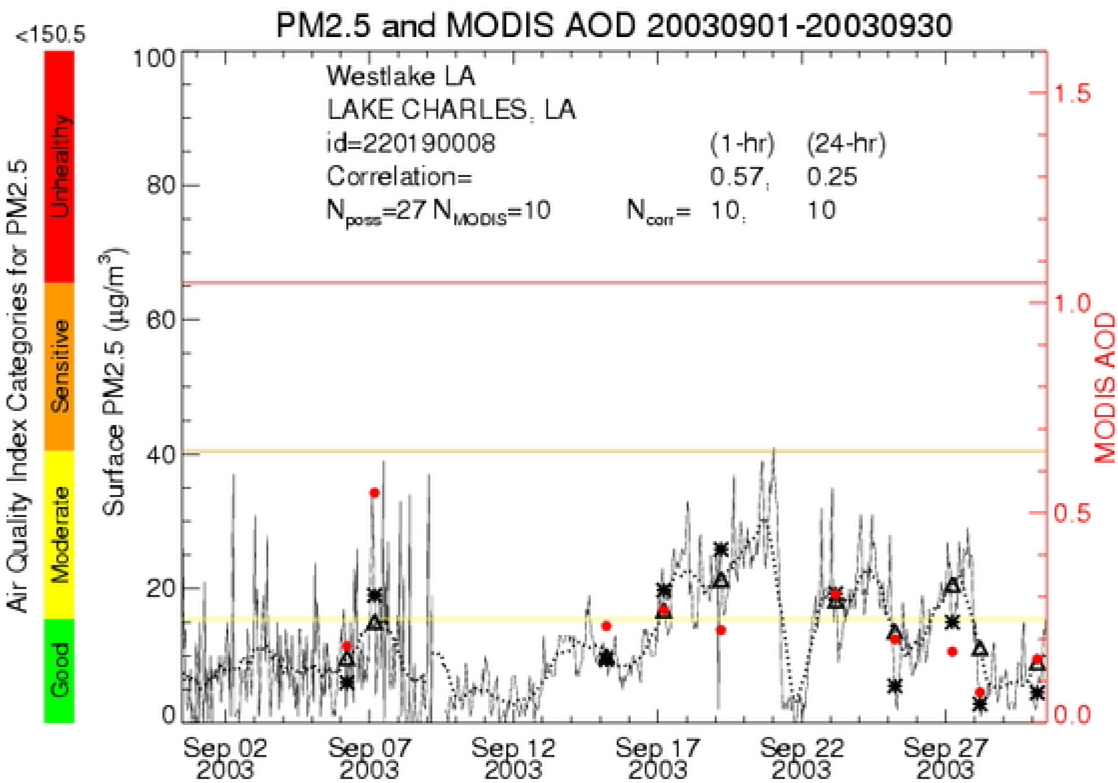

PM2.5 and MODIS AOD 20030901-20030930
<150.5
SER DNR MILW WI
MILWAUKEE-WAUKESHA, WI
id=550790026
(1-hr) (24-hr)
Correlation= 0.54, 0.52
N_poss=29 N_MODIS=11 N_corr= 11, 11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

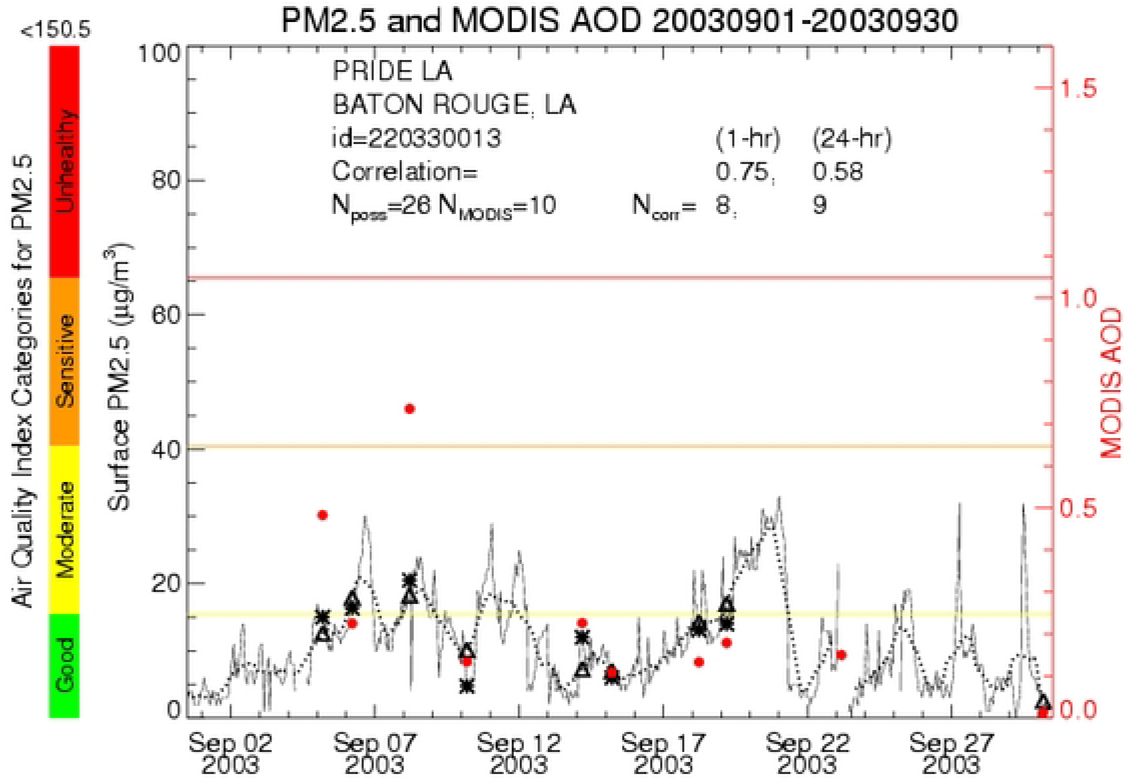


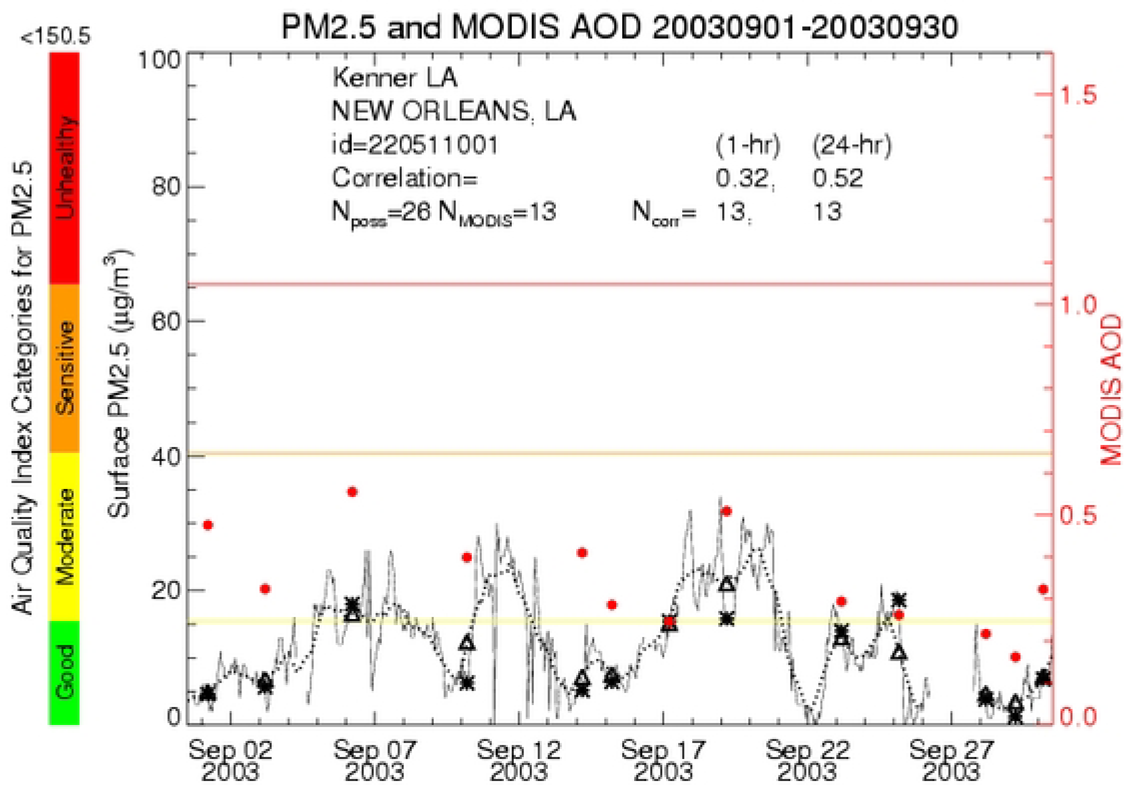
PM2.5 and MODIS AOD 20030901-20030930
<150.5
CLEVELAND-WAUK WI
MILWAUKEE-WAUKESHA, WI
id=551330027 (1-hr) (24-hr)
Correlation= 0.66, 0.59
N_poss=28 N_MODIS=16 N_corr= 10, 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

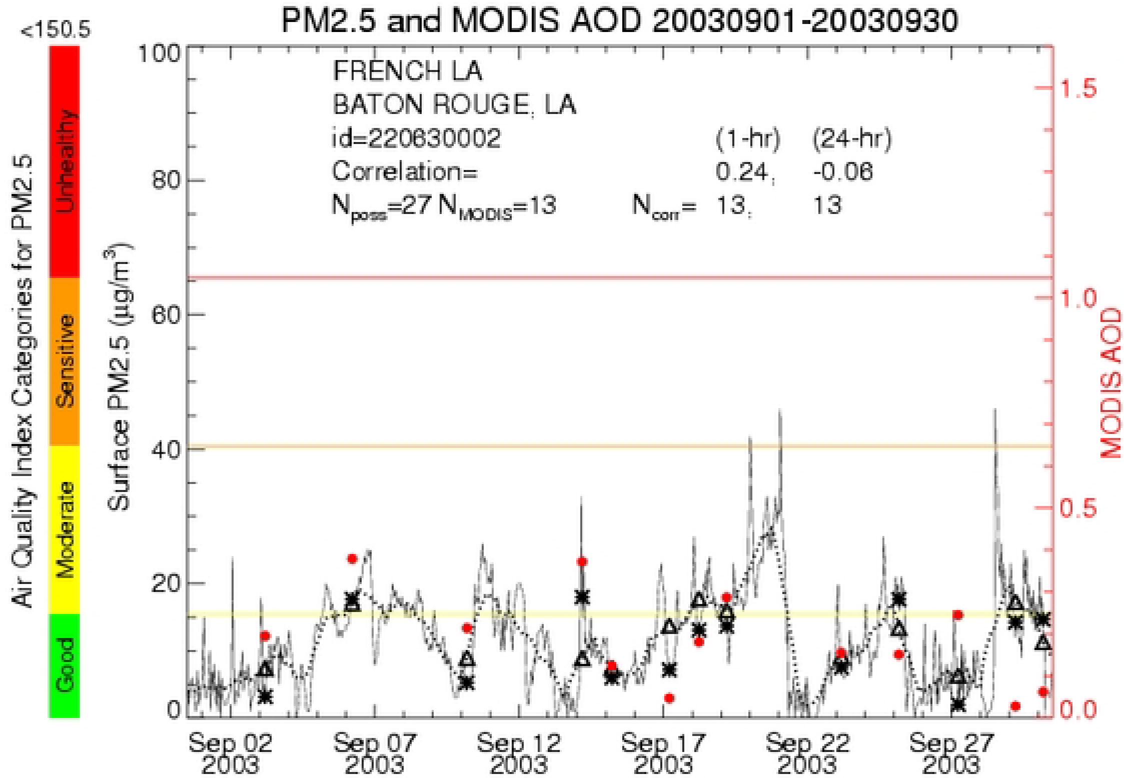
Region 6

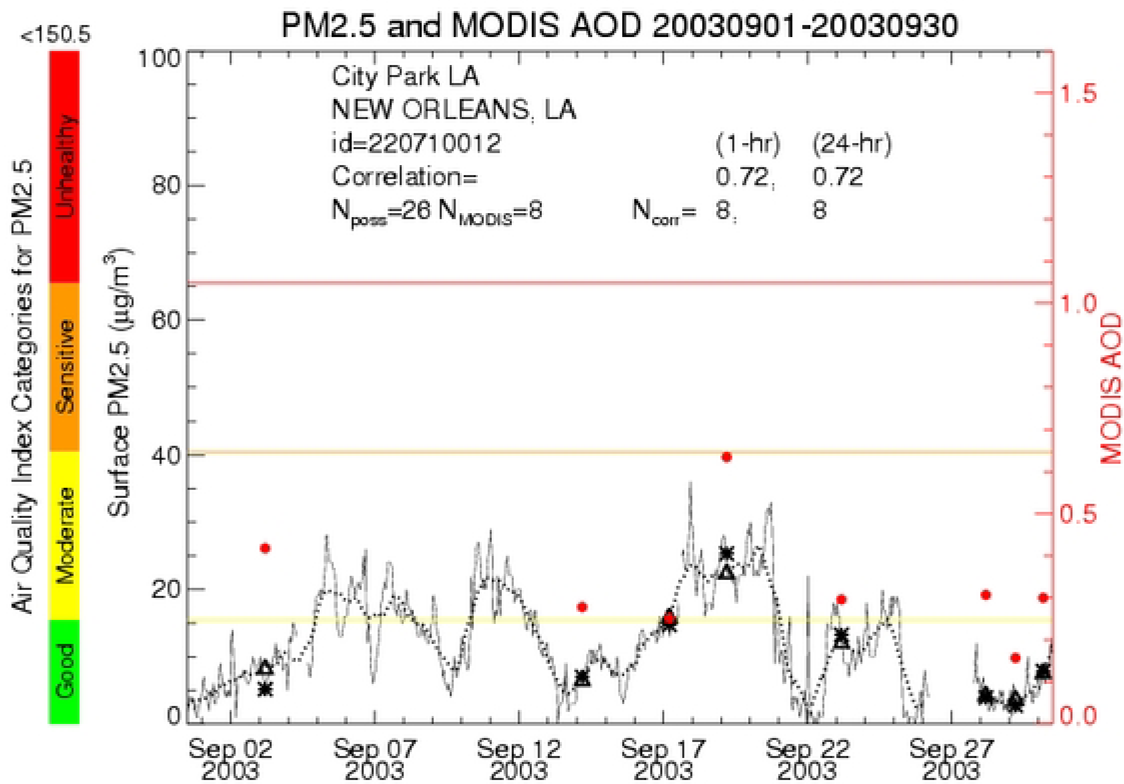

PM2.5 and MODIS AOD 20030901-20030930
Shreveport Airport LA
SHREVEPORT-BOSSIER CITY, LA
id=220150008 (1-hr) (24-hr)
Correlation= 0.47, 0.56
N_poss=29 N_MODIS=16 N_corr= 15, 16
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

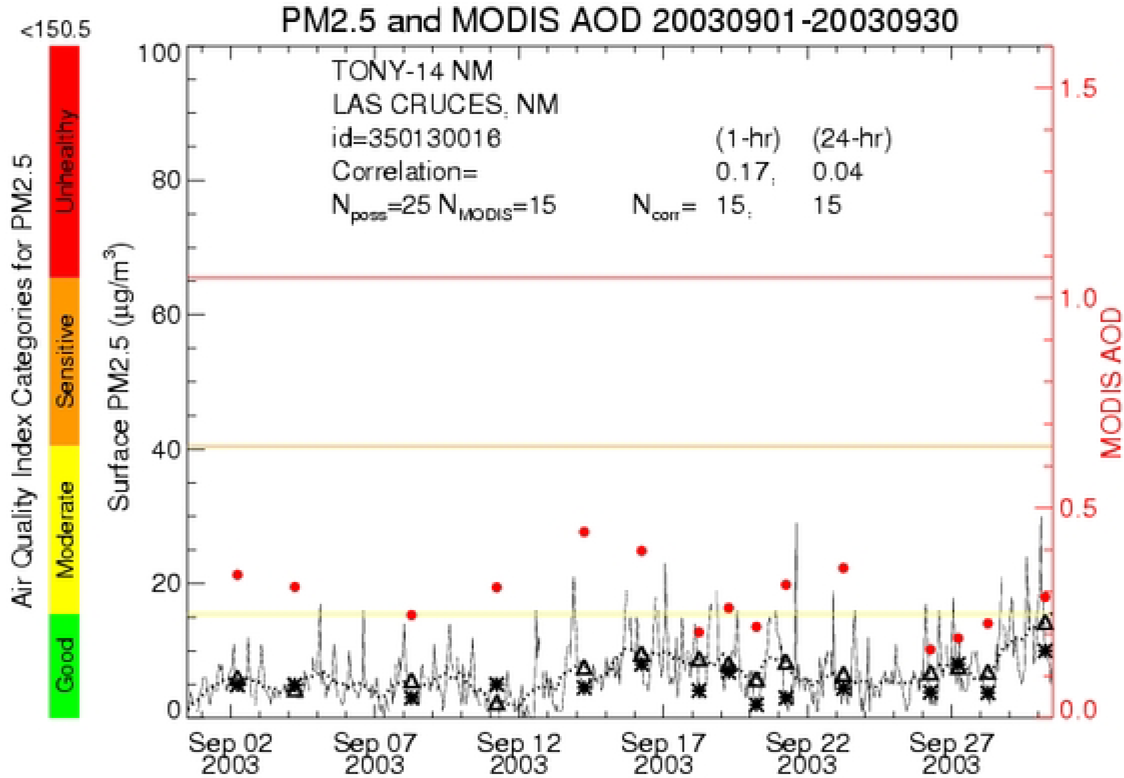

PM2.5 and MODIS AOD 20030901-20030930
Westlake LA
LAKE CHARLES, LA
id=220190008 (1-hr) (24-hr)
Correlation= 0.57, 0.25
N_poss=27 N_MODIS=10 N_corr= 10, 10
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
PRIDE LA
BATON ROUGE, LA
id=220330013 (1-hr) (24-hr)
Correlation= 0.75, 0.58
Nposs=26 NMODIS=10 Ncorr= 8, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

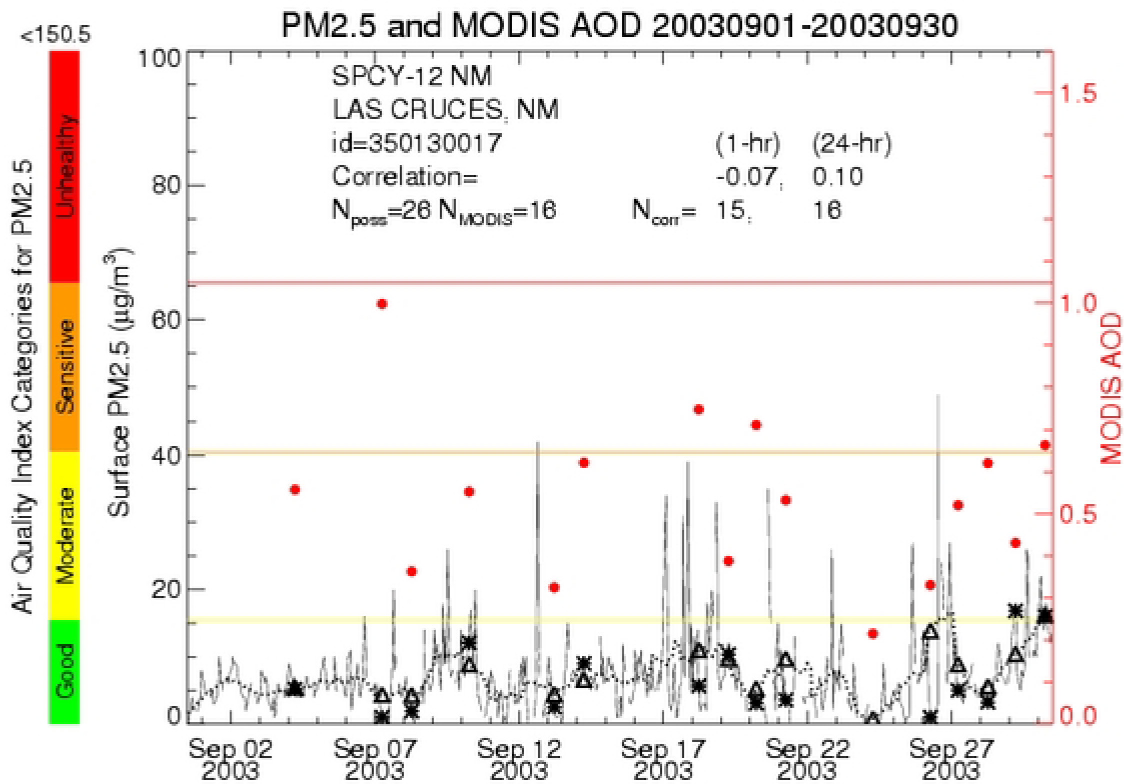

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Kenner LA
NEW ORLEANS, LA
id=220511001 (1-hr) (24-hr)
Correlation= 0.32, 0.52
Nposs=26 NMODIS=13 Ncorr= 13, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
FRENCH LA
BATON ROUGE, LA
id=220330002
(1-hr)
(24-hr)
Correlation=
0.24,
-0.06
N_poss=27 N_MODIS=13
N_corr=
13,
13
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

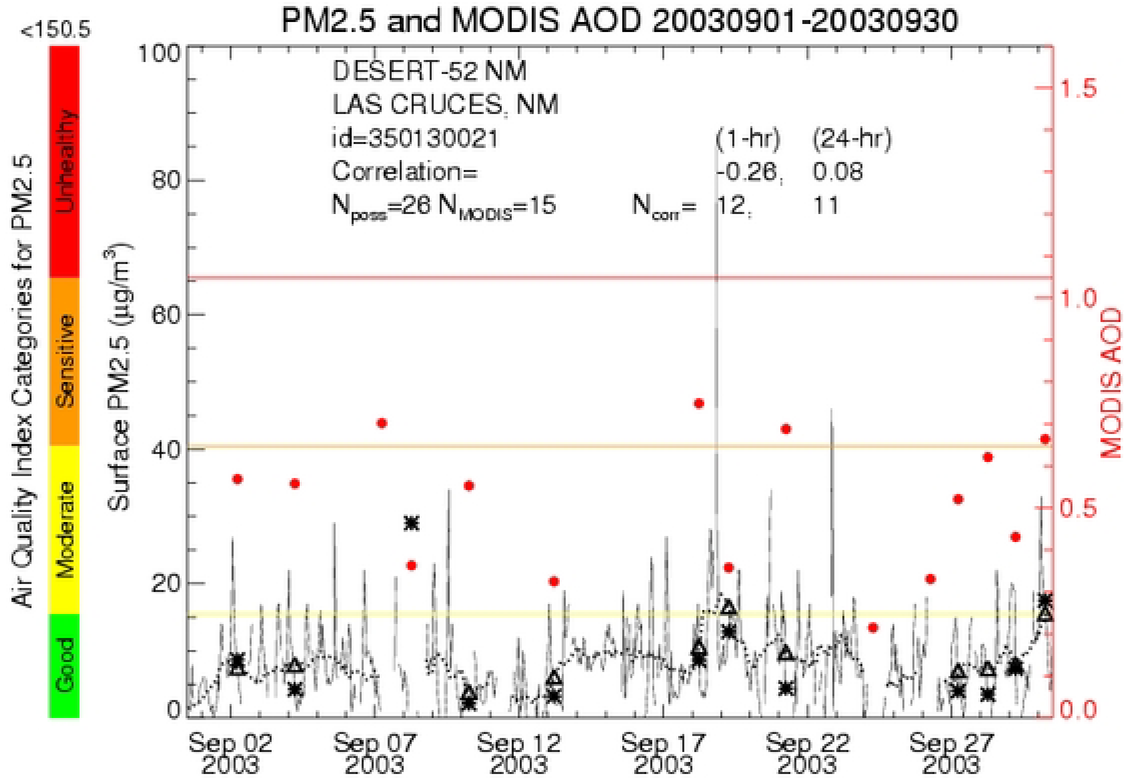

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
City Park LA
NEW ORLEANS, LA
id=220710012
(1-hr)
(24-hr)
Correlation=
0.72,
0.72
N_poss=26 N_MODIS=8
N_corr=
8,
8
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

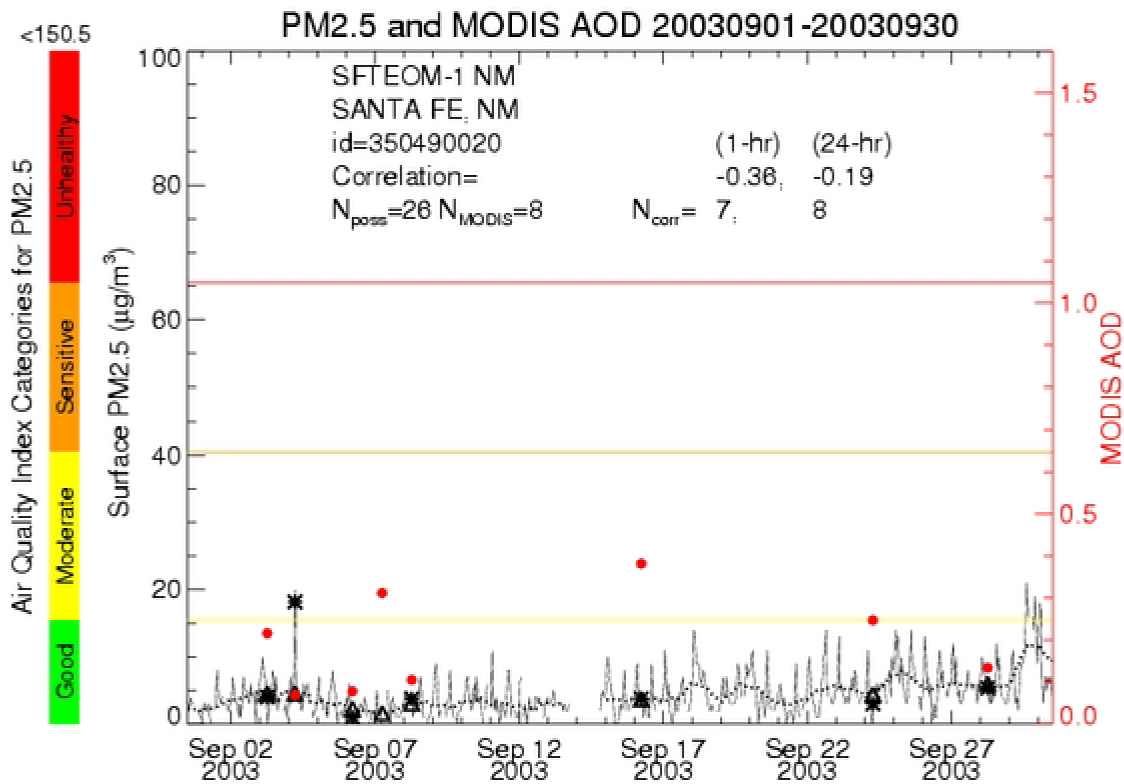


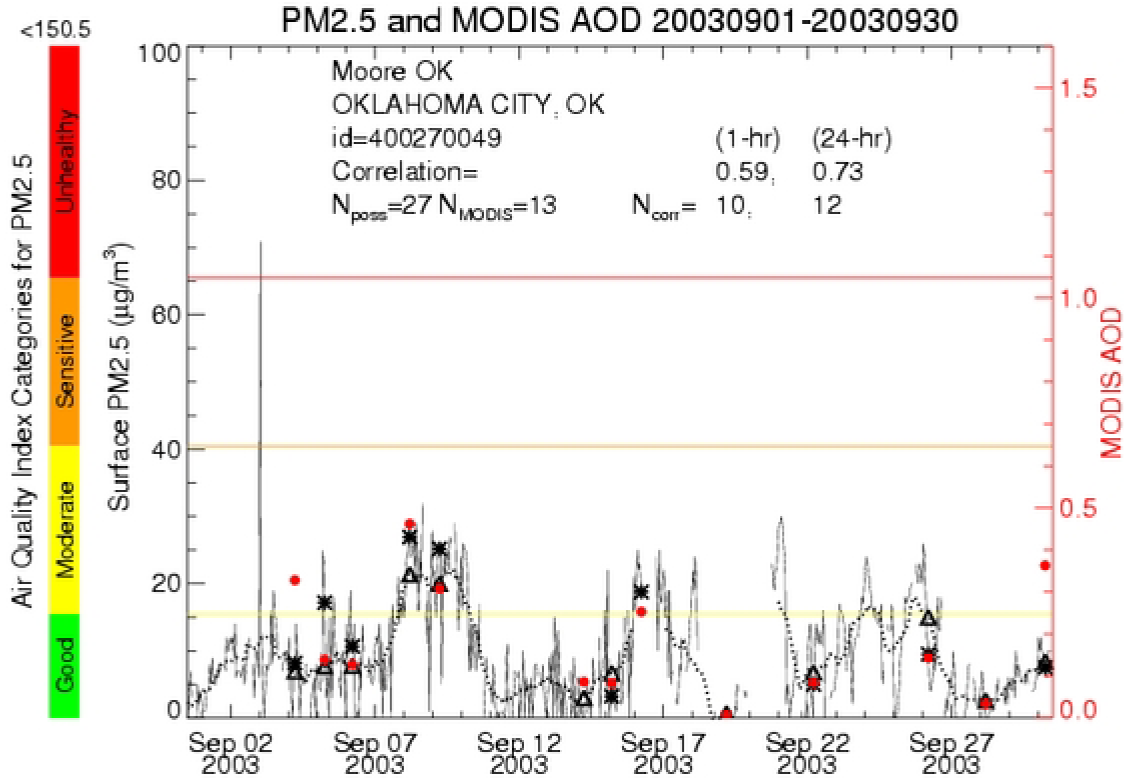
PM2.5 and MODIS AOD 20030901-20030930
<150.5
TONY-14 NM
LAS CRUCES, NM
id=350130016
(1-hr) (24-hr)
Correlation= 0.17, 0.04
N_{poss}=25 N_{MODIS}=15 N_{corr}= 15, 15
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



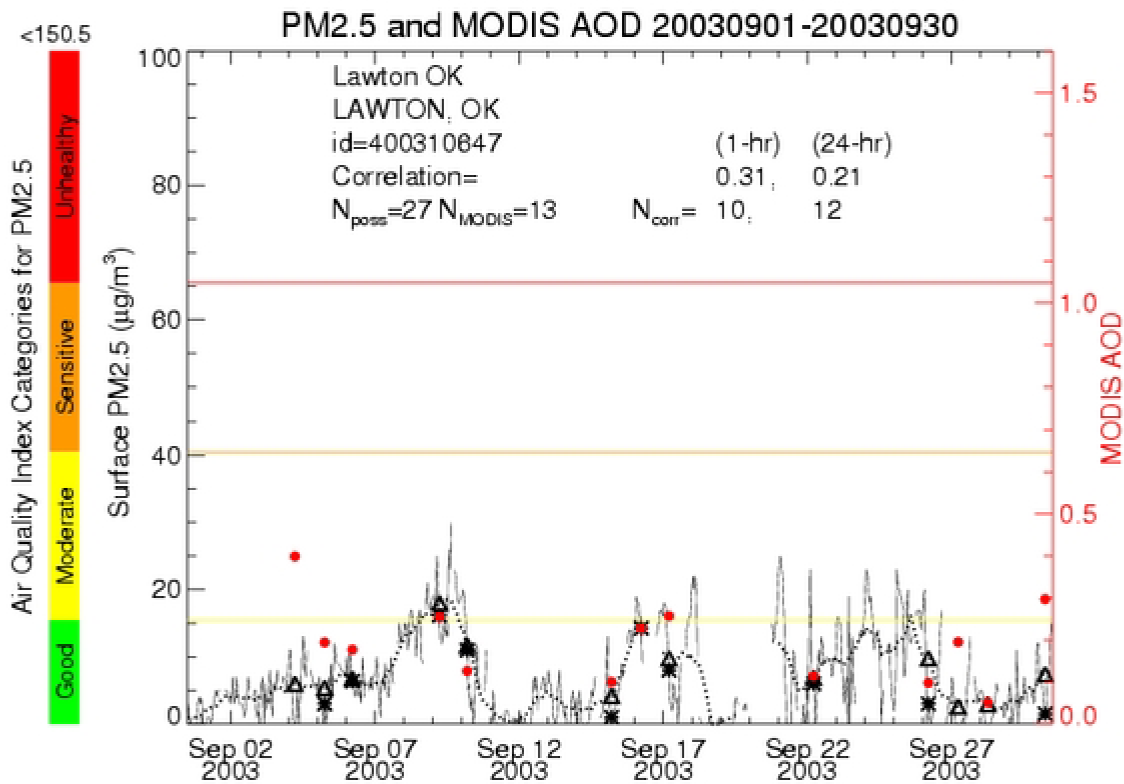
PM2.5 and MODIS AOD 20030901-20030930
<150.5
SPCY-12 NM
LAS CRUCES, NM
id=350130017
(1-hr) (24-hr)
Correlation= -0.07, 0.10
N_{poss}=26 N_{MODIS}=16 N_{corr}= 15, 16
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
DESERT-52 NM
LAS CRUCES, NM
id=350130021
(1-hr) (24-hr)
Correlation= -0.26, 0.08
Nposs=26 NMODIS=15 Ncorr= 12, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

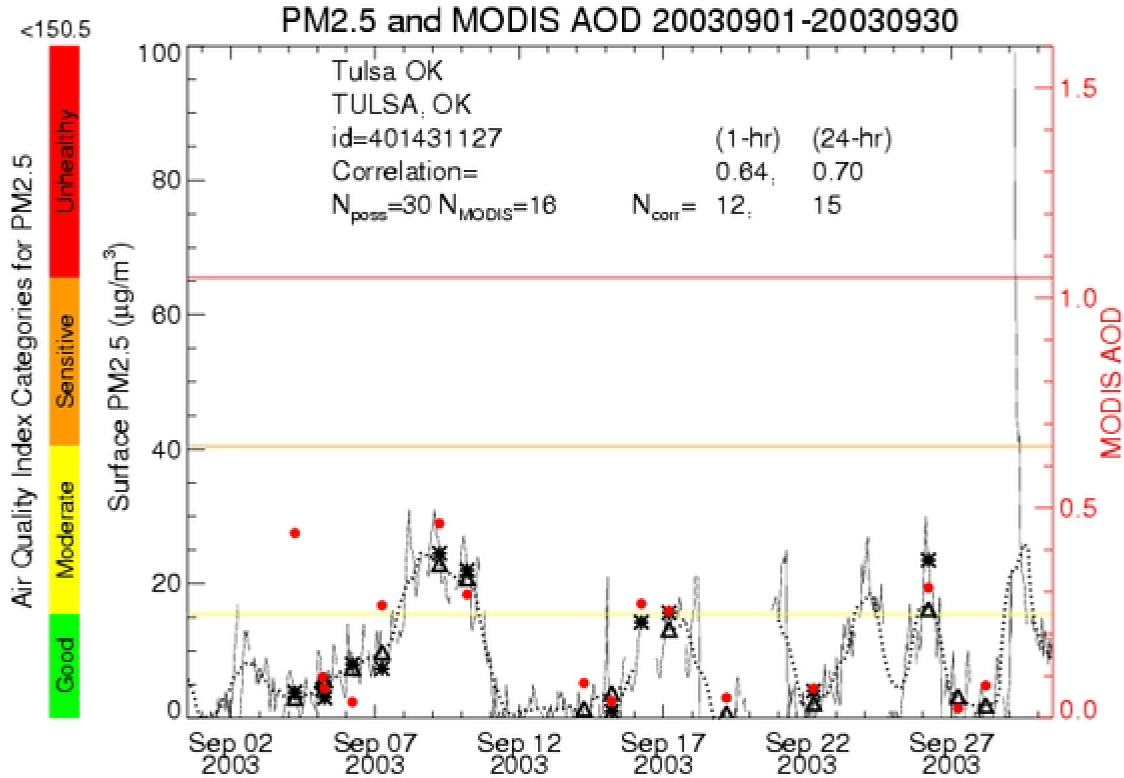

PM2.5 and MODIS AOD 20030901-20030930
SFTEOM-1 NM
SANTA FE, NM
id=350490020
(1-hr) (24-hr)
Correlation= -0.36, -0.19
Nposs=26 NMODIS=8 Ncorr= 7, 8
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

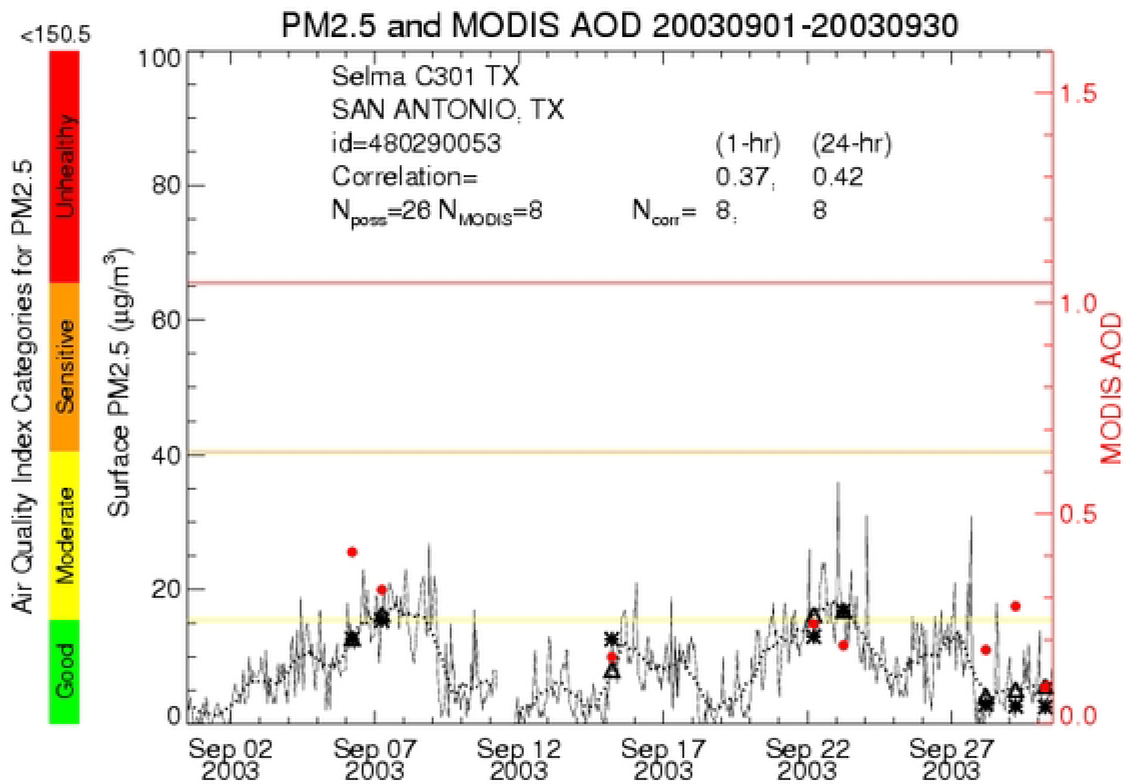


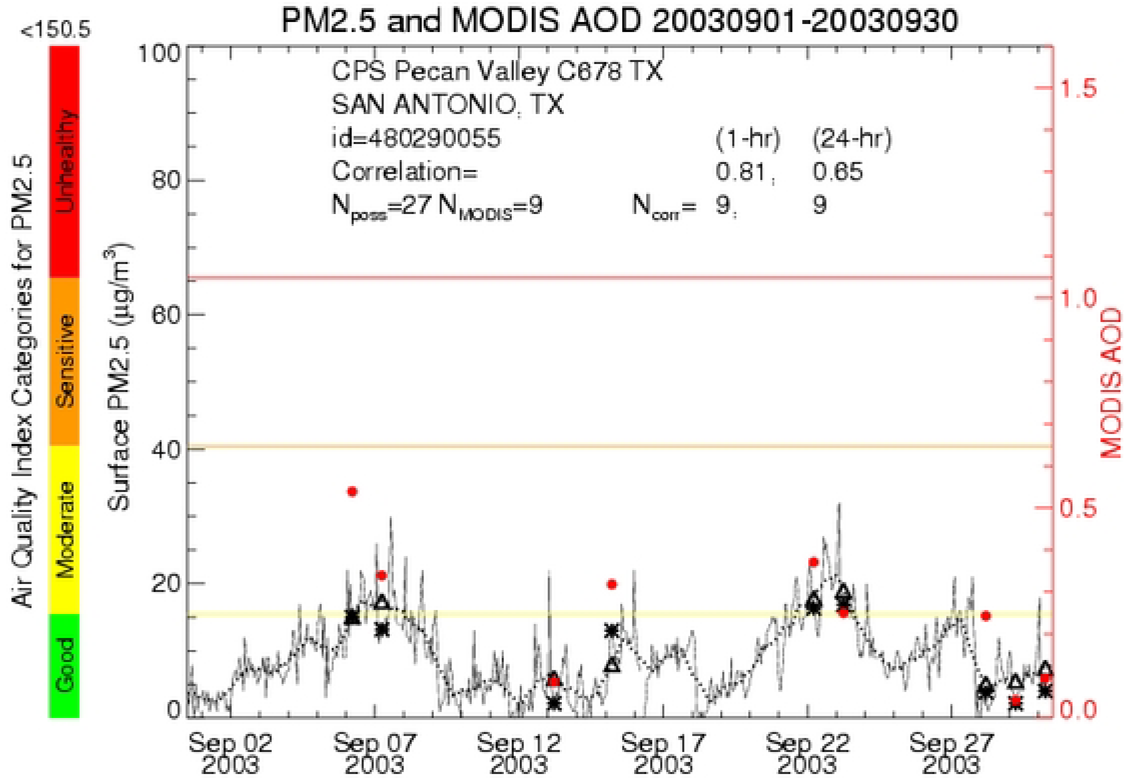
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Moore OK
OKLAHOMA CITY, OK
id=400270049
(1-hr) (24-hr)
Correlation= 0.59, 0.73
N_poss=27 N_MODIS=13 N_corr= 10, 12
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

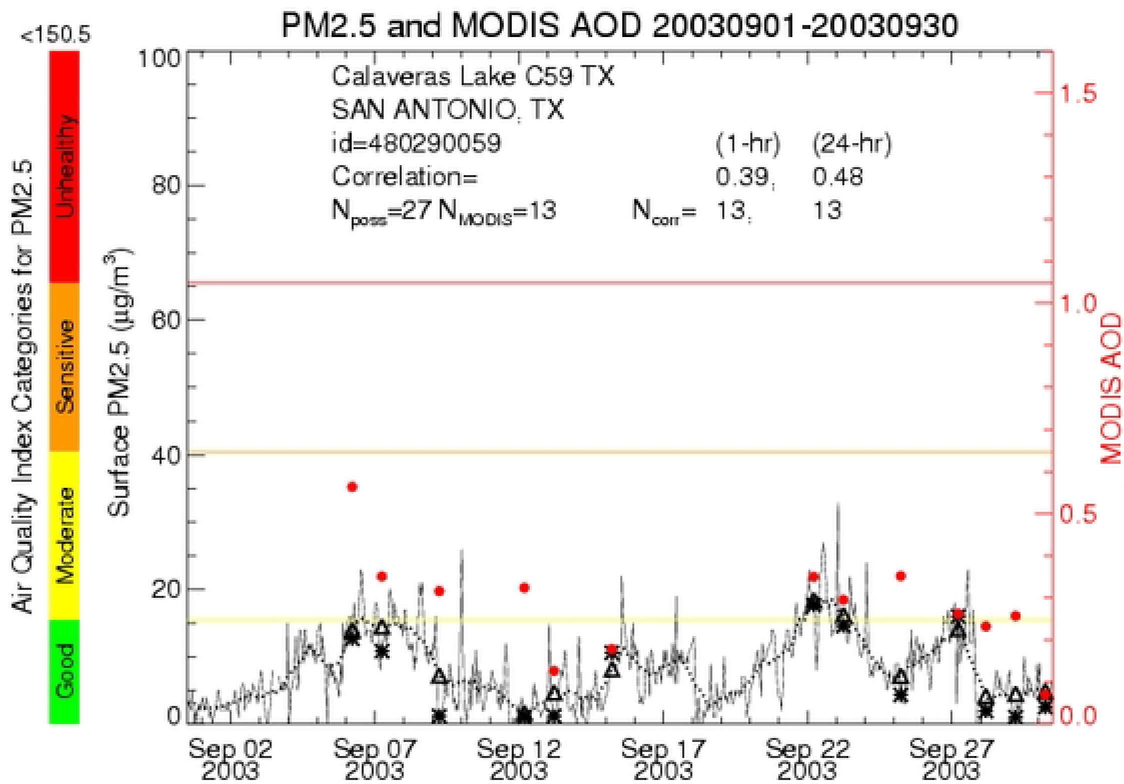


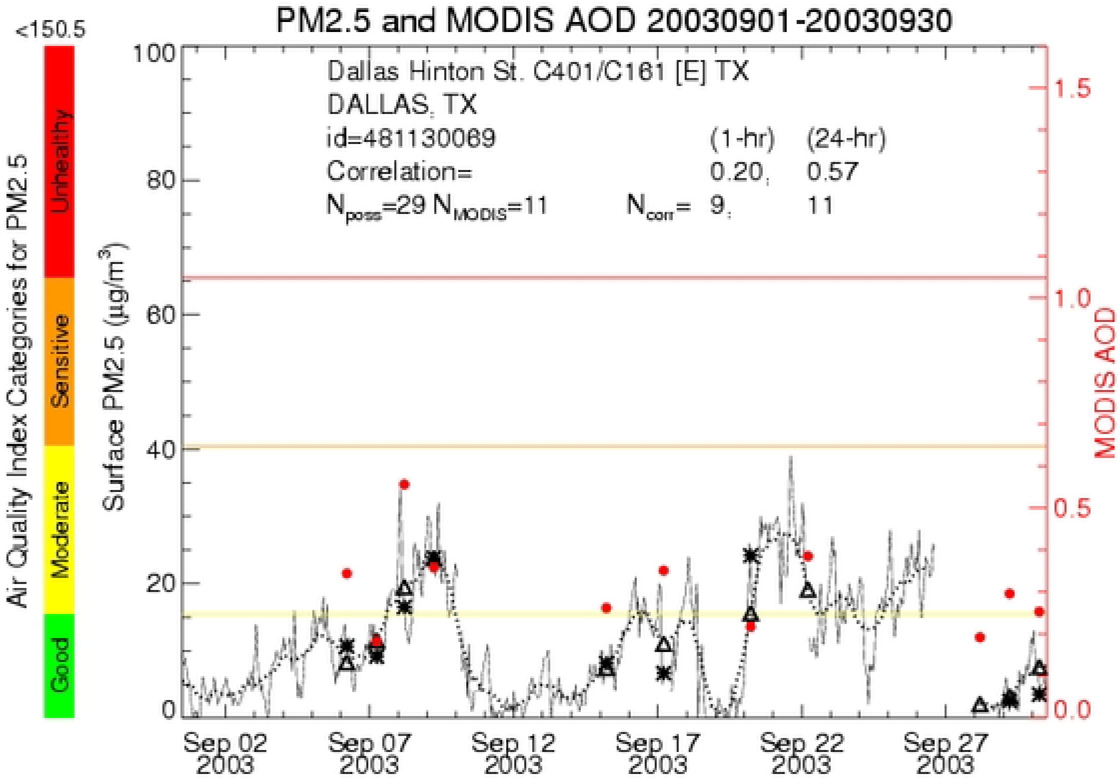
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Lawton OK
LAWTON, OK
id=400310647
(1-hr) (24-hr)
Correlation= 0.31, 0.21
N_poss=27 N_MODIS=13 N_corr= 10, 12
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

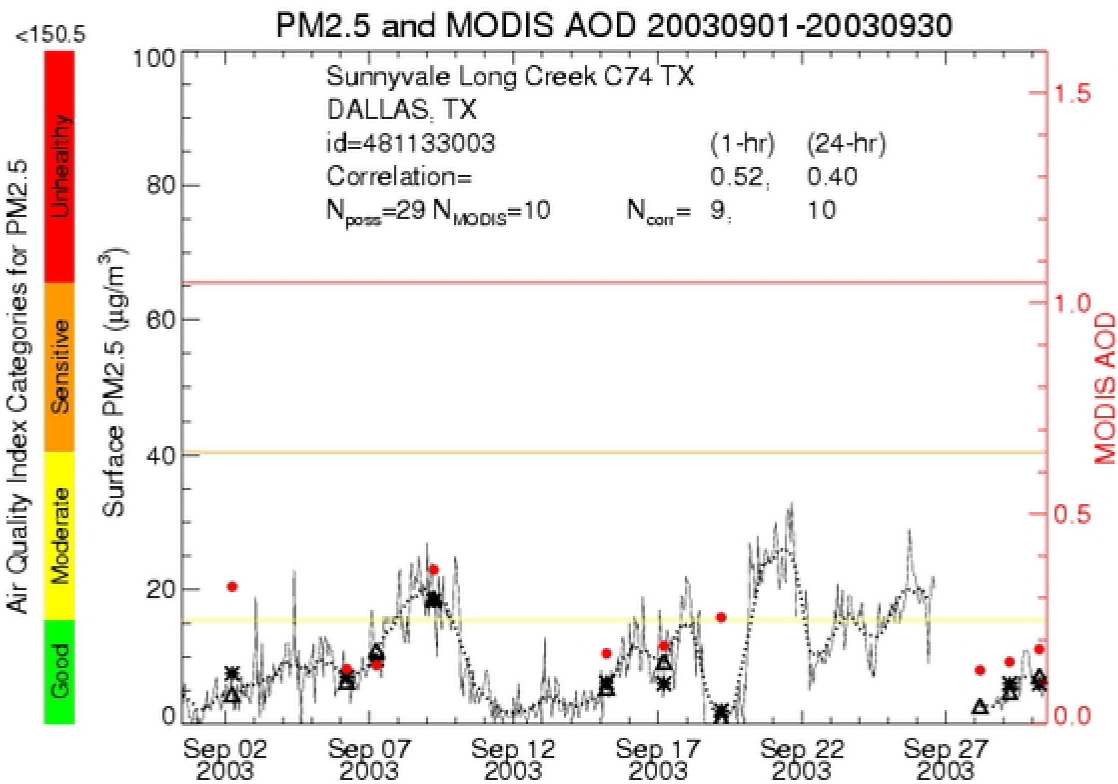

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Tulsa OK
TULSA, OK
id=401431127
(1-hr) (24-hr)
Correlation= 0.64, 0.70
Nposs=30 NMODIS=16 Ncorr= 12, 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

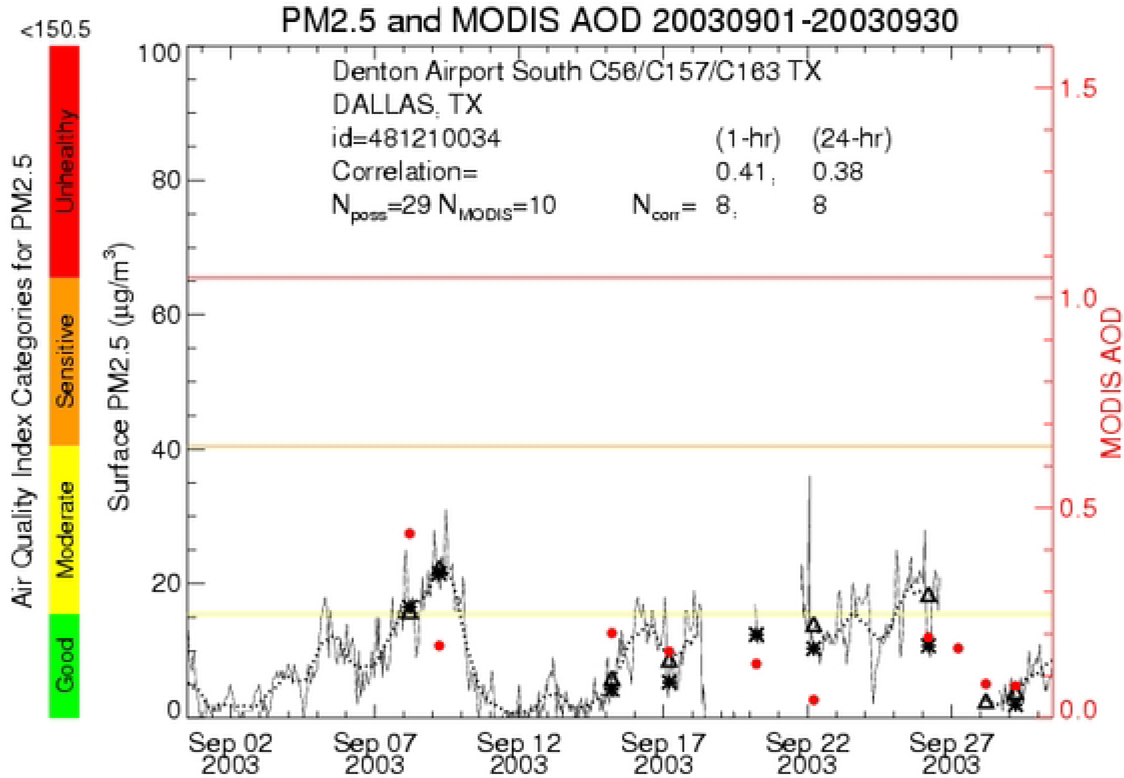

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Selma C301 TX
SAN ANTONIO, TX
id=480290053
(1-hr) (24-hr)
Correlation= 0.37, 0.42
Nposs=26 NMODIS=8 Ncorr= 8, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

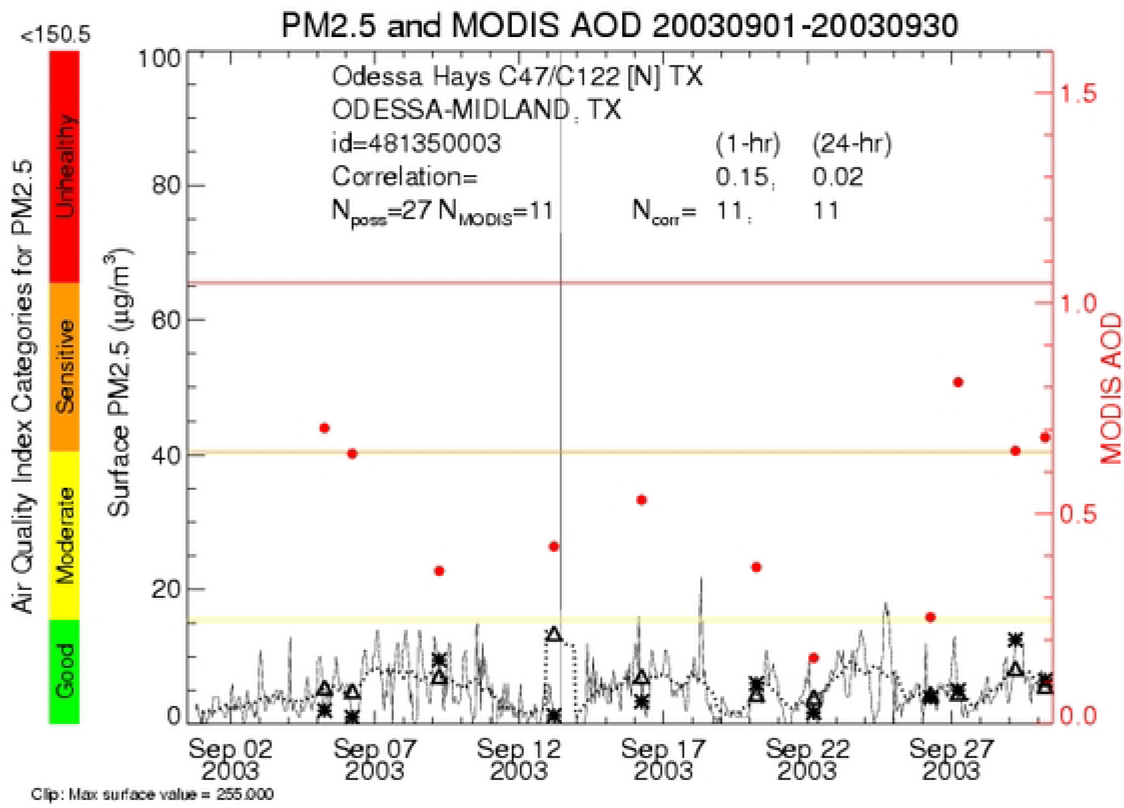

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
CPS Pecan Valley C678 TX
SAN ANTONIO, TX
id=480290055 (1-hr) (24-hr)
Correlation= 0.81, 0.65
Nposs=27 NMODIS=9 Ncorr= 9, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

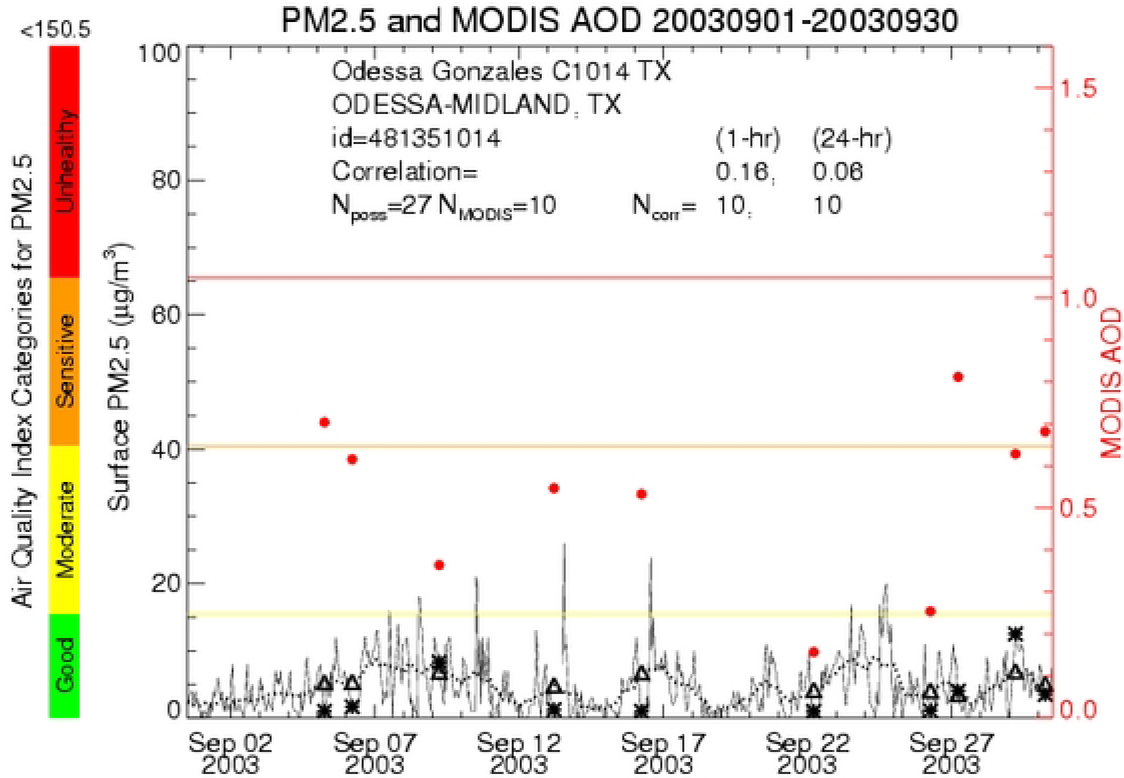

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Calaveras Lake C59 TX
SAN ANTONIO, TX
id=480290059 (1-hr) (24-hr)
Correlation= 0.39, 0.48
Nposs=27 NMODIS=13 Ncorr= 13, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

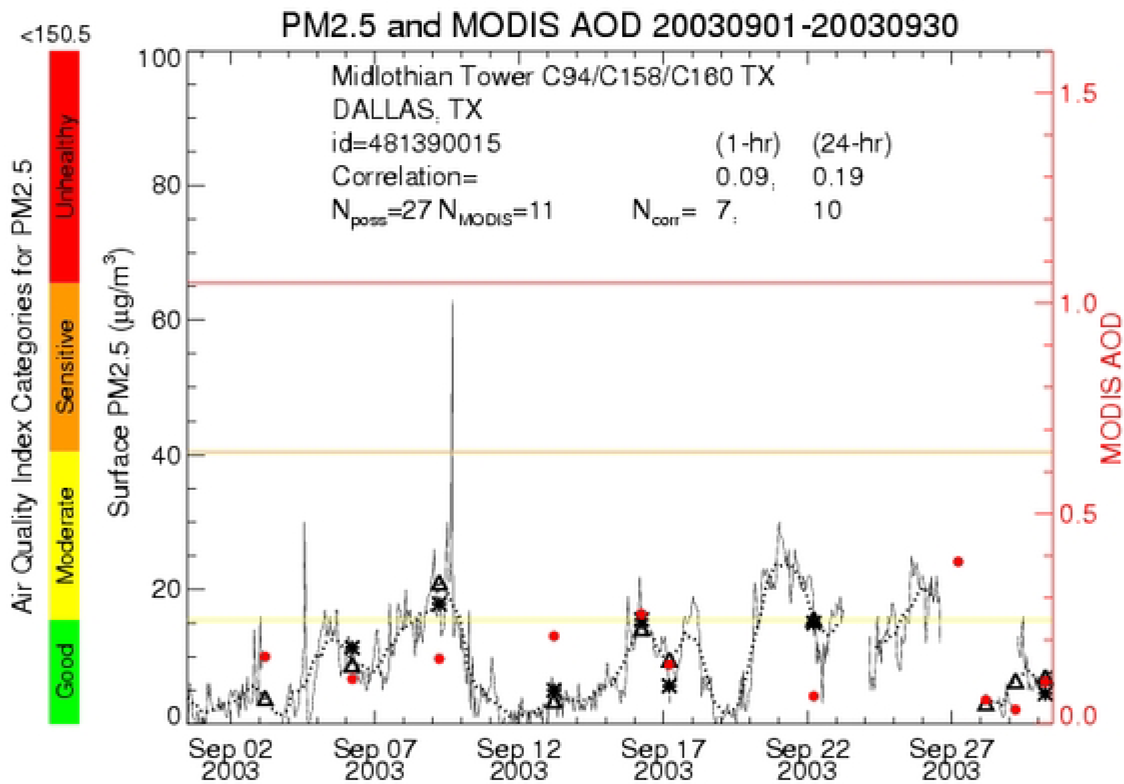

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Dallas Hinton St. C401/C161 [E] TX
DALLAS, TX
id=481130069
(1-hr)
(24-hr)
Correlation=
0.20,
0.57
Nposs=29 NMODIS=11
Ncorr=
9,
11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

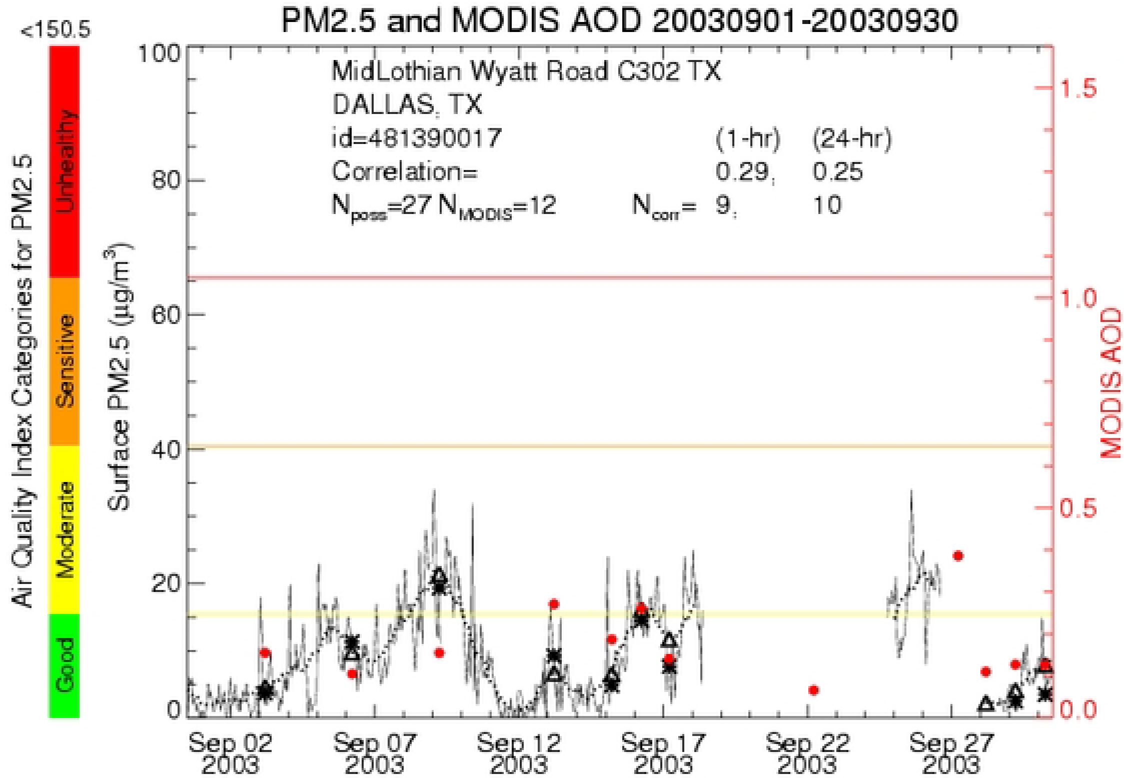

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Sunnyvale Long Creek C74 TX
DALLAS, TX
id=481133003
(1-hr)
(24-hr)
Correlation=
0.52,
0.40
Nposs=29 NMODIS=10
Ncorr=
9,
10
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

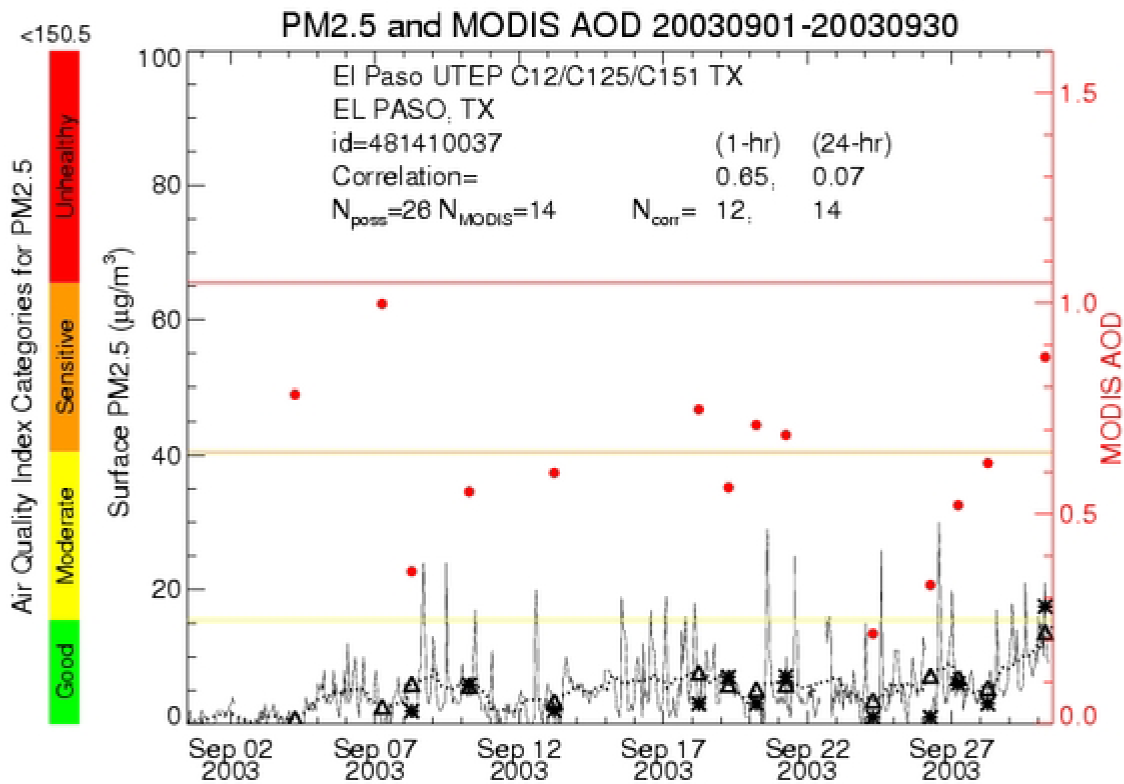

PM2.5 and MODIS AOD 20030901-20030930
Denton Airport South C56/C157/C163 TX
DALLAS, TX
id=481210034
(1-hr) (24-hr)
Correlation= 0.41, 0.38
Nposs=29 NMODIS=10 Ncorr= 8, 8
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

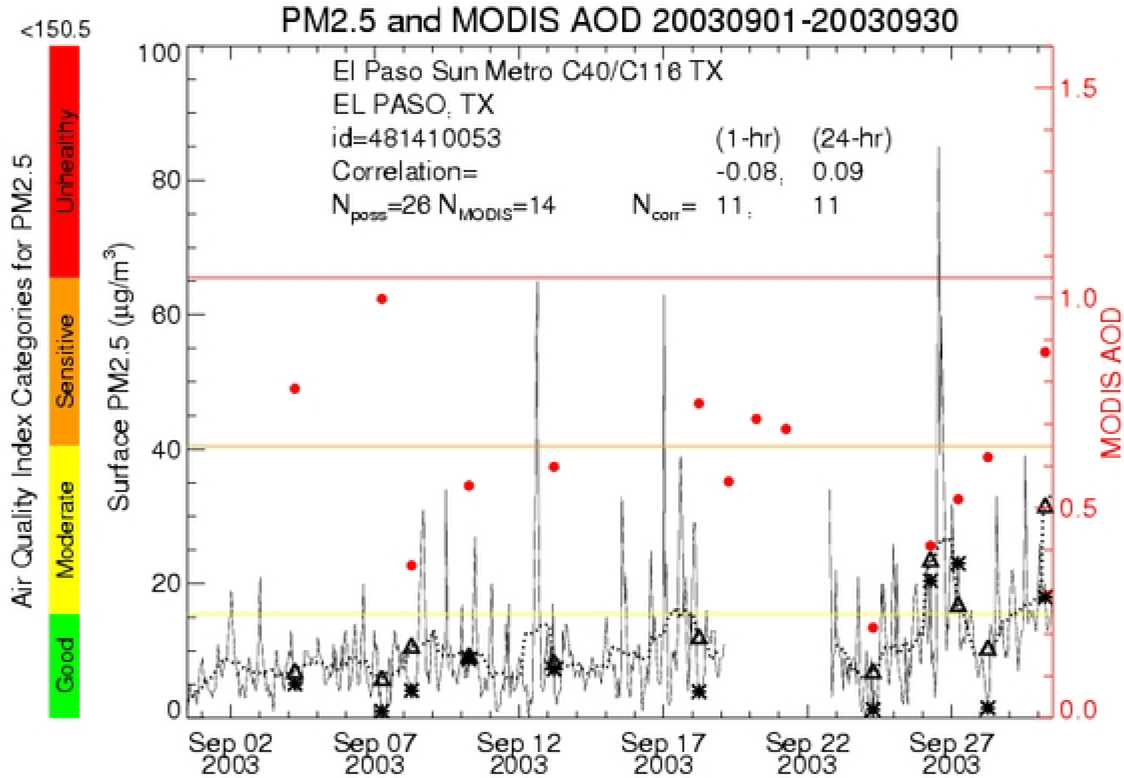

PM2.5 and MODIS AOD 20030901-20030930
Odessa Hays C47/C122 [N] TX
ODESSA-MIDLAND, TX
id=481350003
(1-hr) (24-hr)
Correlation= 0.15, 0.02
Nposs=27 NMODIS=11 Ncorr= 11, 11
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 255.000

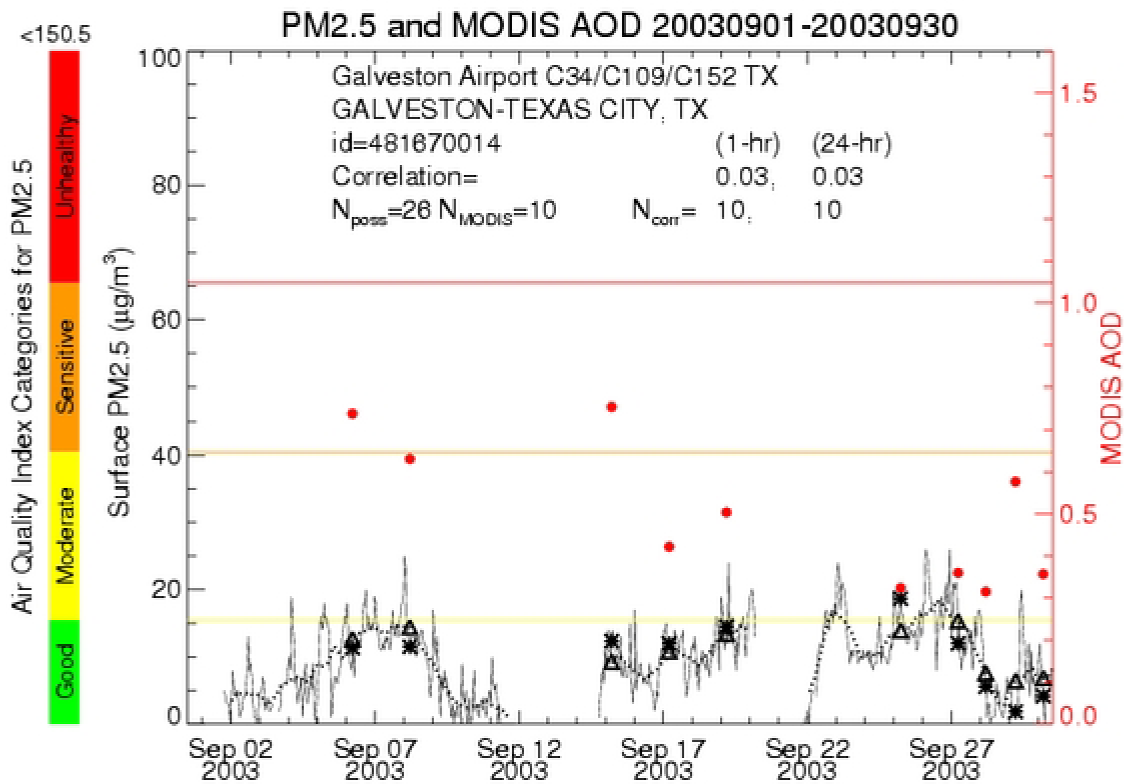

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Odessa Gonzales C1014 TX
ODESSA-MIDLAND, TX
id=481351014 (1-hr) (24-hr)
Correlation= 0.16, 0.06
Nposs=27 NMODIS=10 Ncorr= 10, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

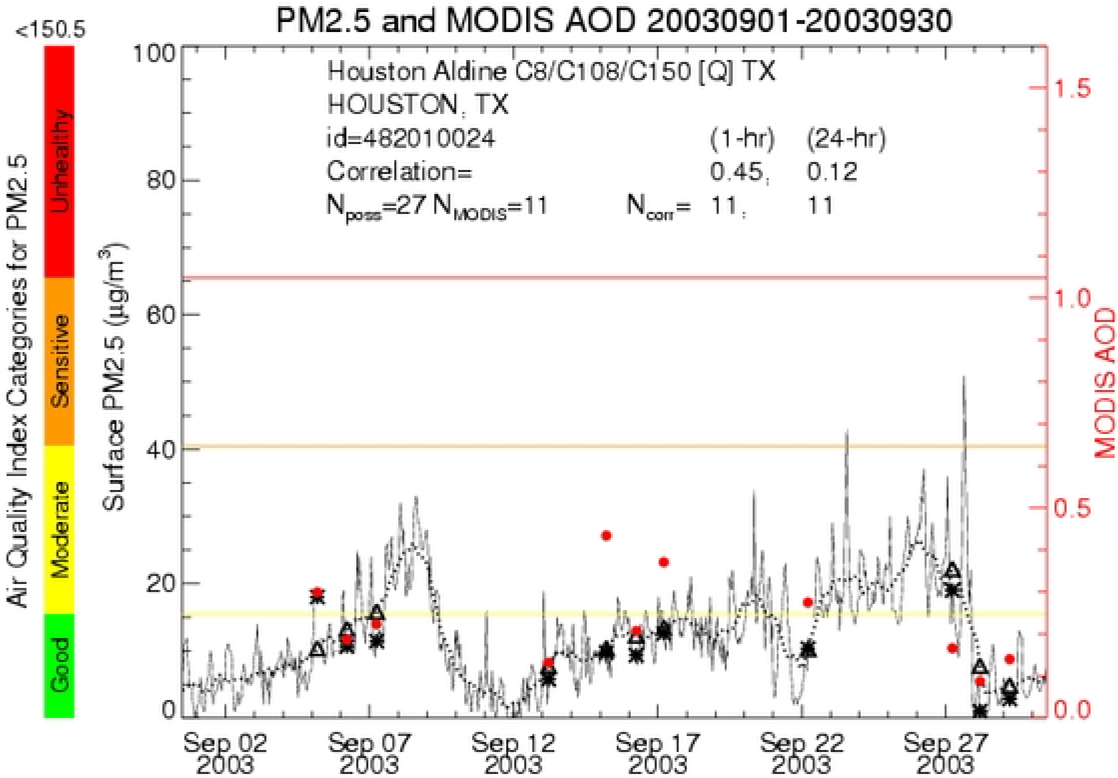

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Midlothian Tower C94/C158/C160 TX
DALLAS, TX
id=481390015 (1-hr) (24-hr)
Correlation= 0.09, 0.19
Nposs=27 NMODIS=11 Ncorr= 7, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

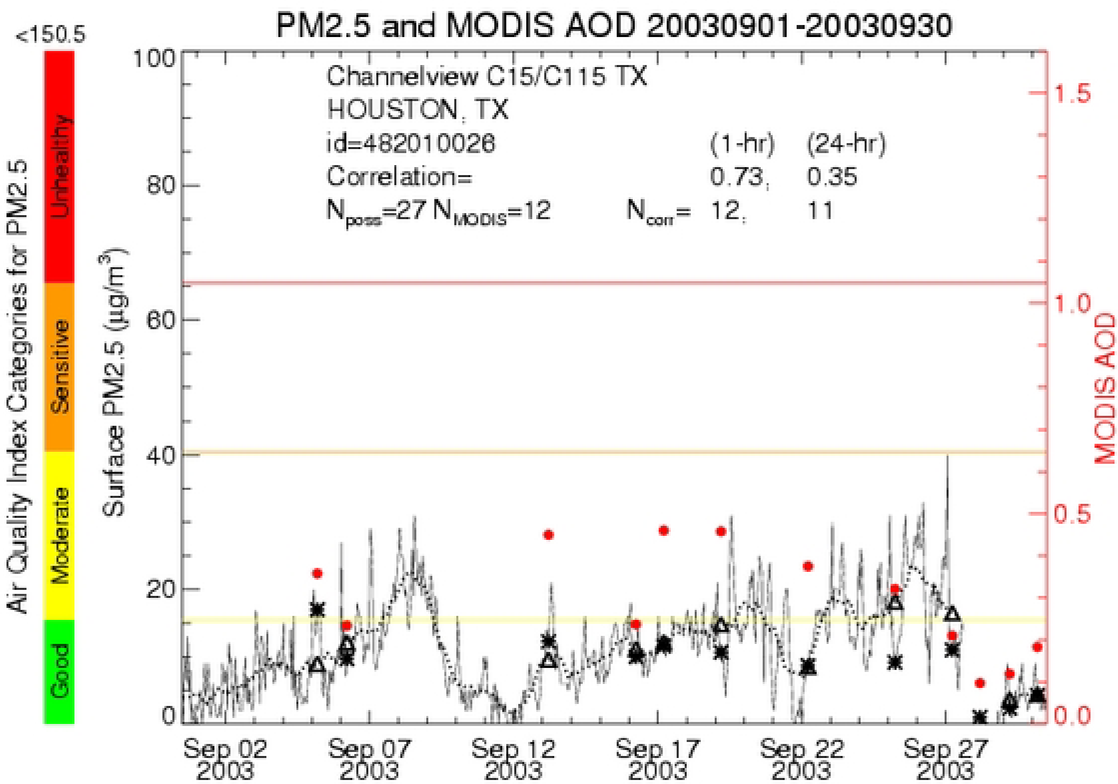

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
MidLothian Wyatt Road C302 TX
DALLAS, TX
id=481390017 (1-hr) (24-hr)
Correlation= 0.29, 0.25
N_poss=27 N_MODIS=12 N_corr= 9, 10
Surface PM2.5 (µg/m3)
MODIS AOD
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

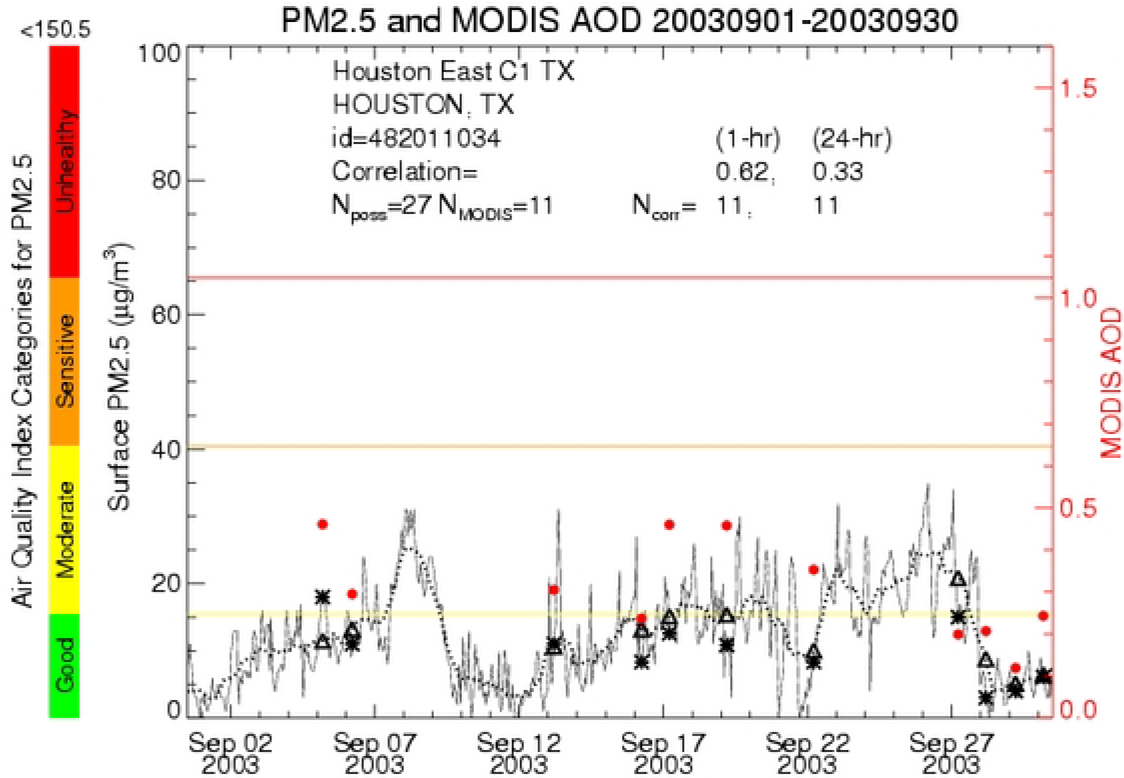

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
El Paso UTEP C12/C125/C151 TX
EL PASO, TX
id=481410037 (1-hr) (24-hr)
Correlation= 0.65, 0.07
N_poss=26 N_MODIS=14 N_corr= 12, 14
Surface PM2.5 (µg/m3)
MODIS AOD
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

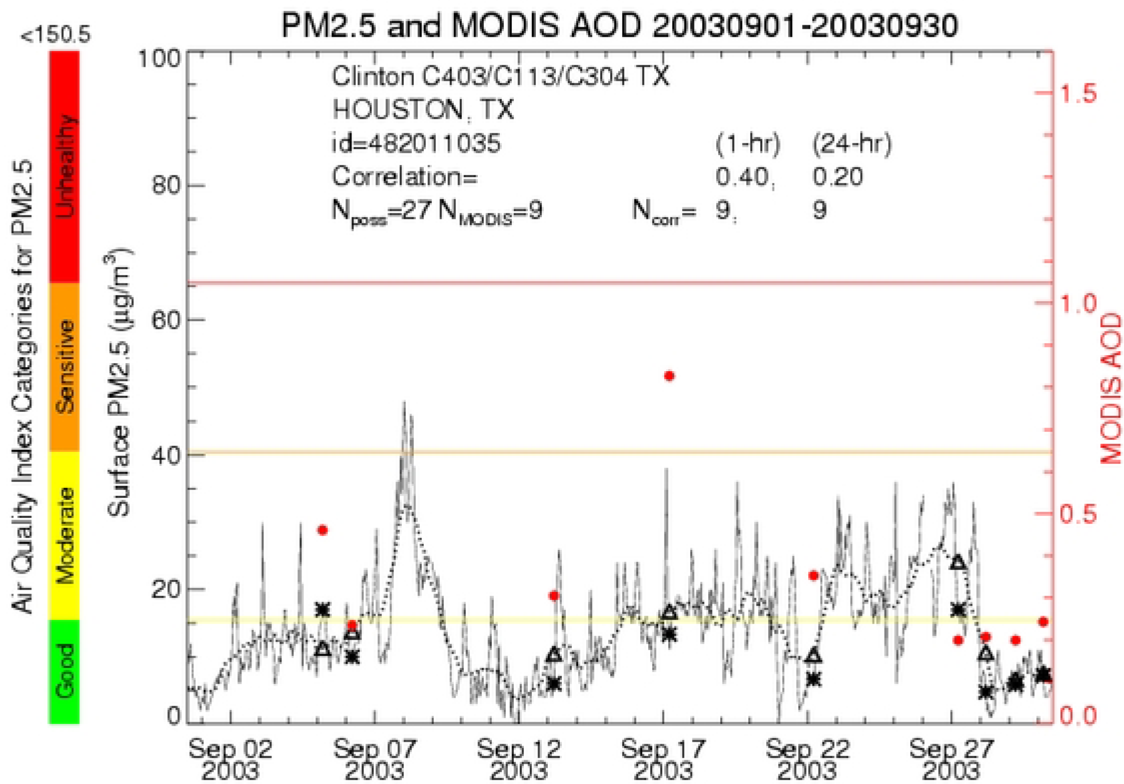

PM2.5 and MODIS AOD 20030901-20030930
El Paso Sun Metro C40/C116 TX
EL PASO, TX
id=481410053
(1-hr) (24-hr)
Correlation= -0.08, 0.09
N_poss=26 N_MODIS=14 N_corr= 11, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

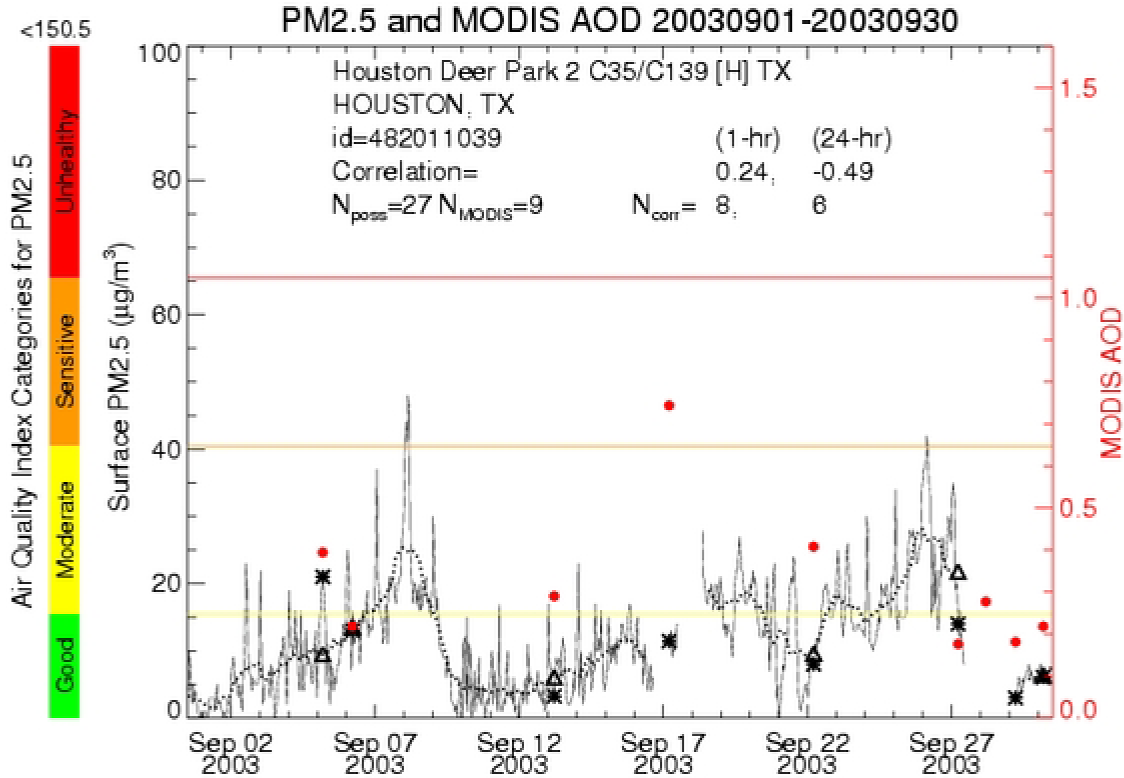

PM2.5 and MODIS AOD 20030901-20030930
Galveston Airport C34/C109/C152 TX
GALVESTON-TEXAS CITY, TX
id=481670014
(1-hr) (24-hr)
Correlation= 0.03, 0.03
N_poss=26 N_MODIS=10 N_corr= 10, 10
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

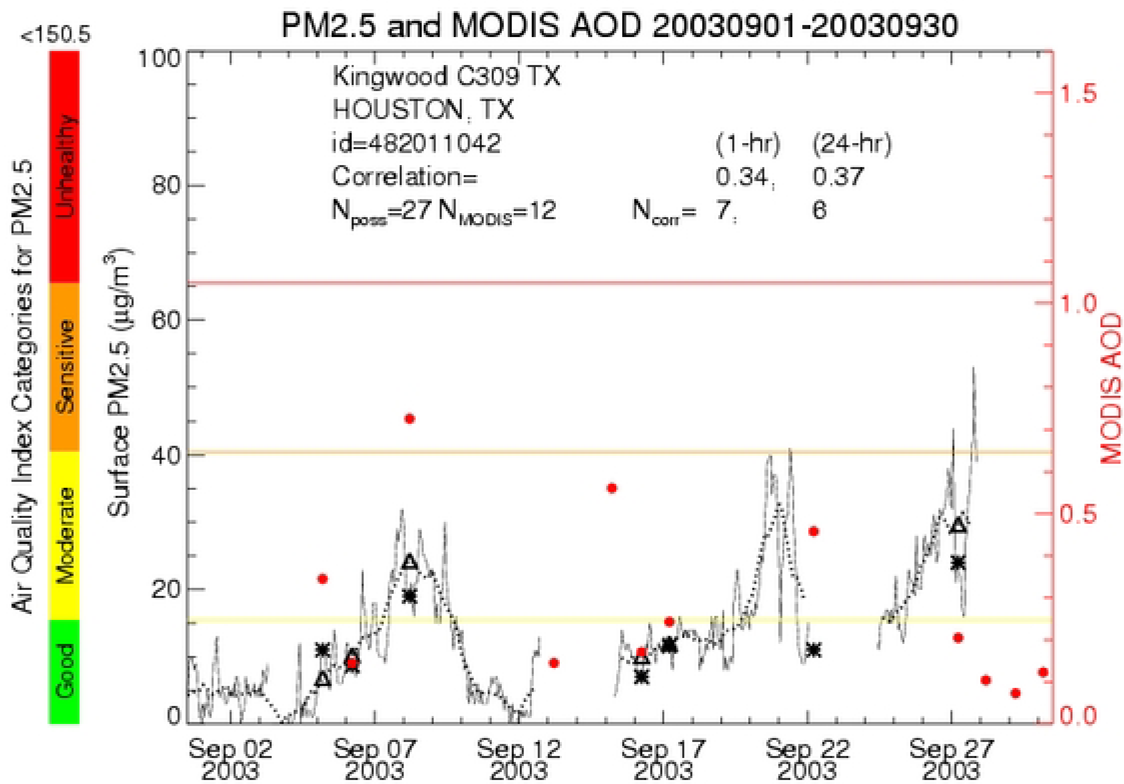

PM2.5 and MODIS AOD 20030901-20030930
Houston Aldine C8/C108/C150 [Q] TX
HOUSTON, TX
id=482010024
(1-hr) (24-hr)
Correlation= 0.45, 0.12
N_{poss}=27 N_{MODIS}=11 N_{corr}= 11, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

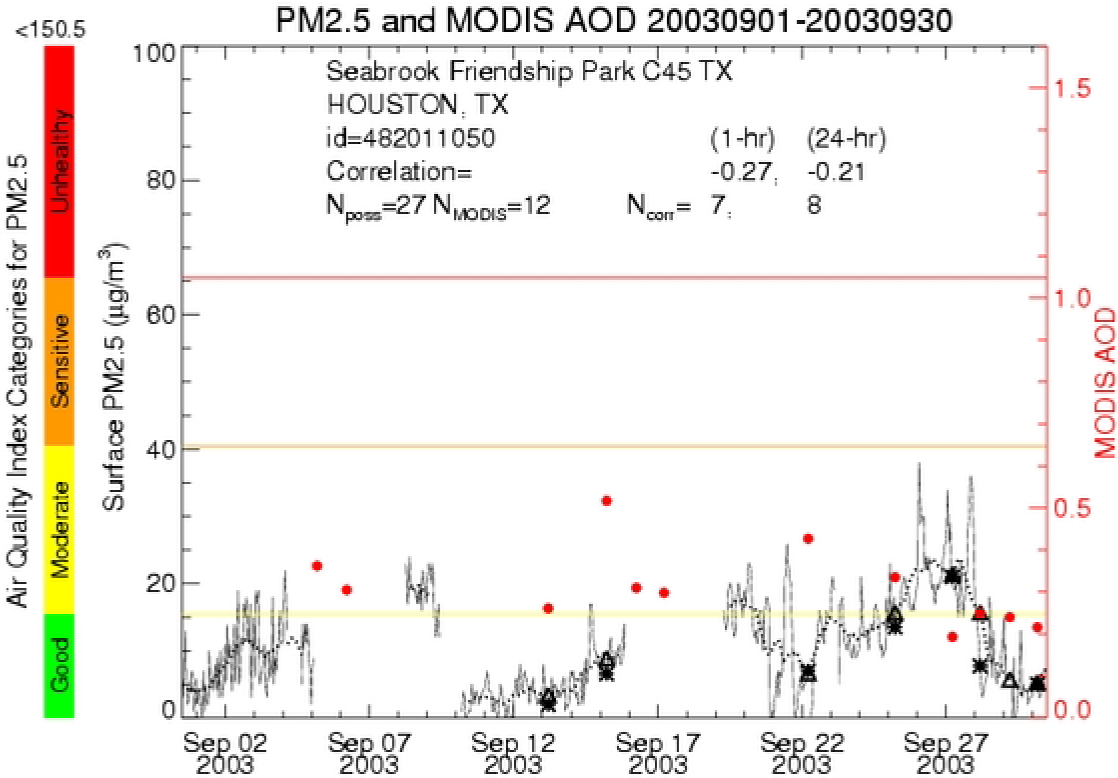

PM2.5 and MODIS AOD 20030901-20030930
Channelview C15/C115 TX
HOUSTON, TX
id=482010026
(1-hr) (24-hr)
Correlation= 0.73, 0.35
N_{poss}=27 N_{MODIS}=12 N_{corr}= 12, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

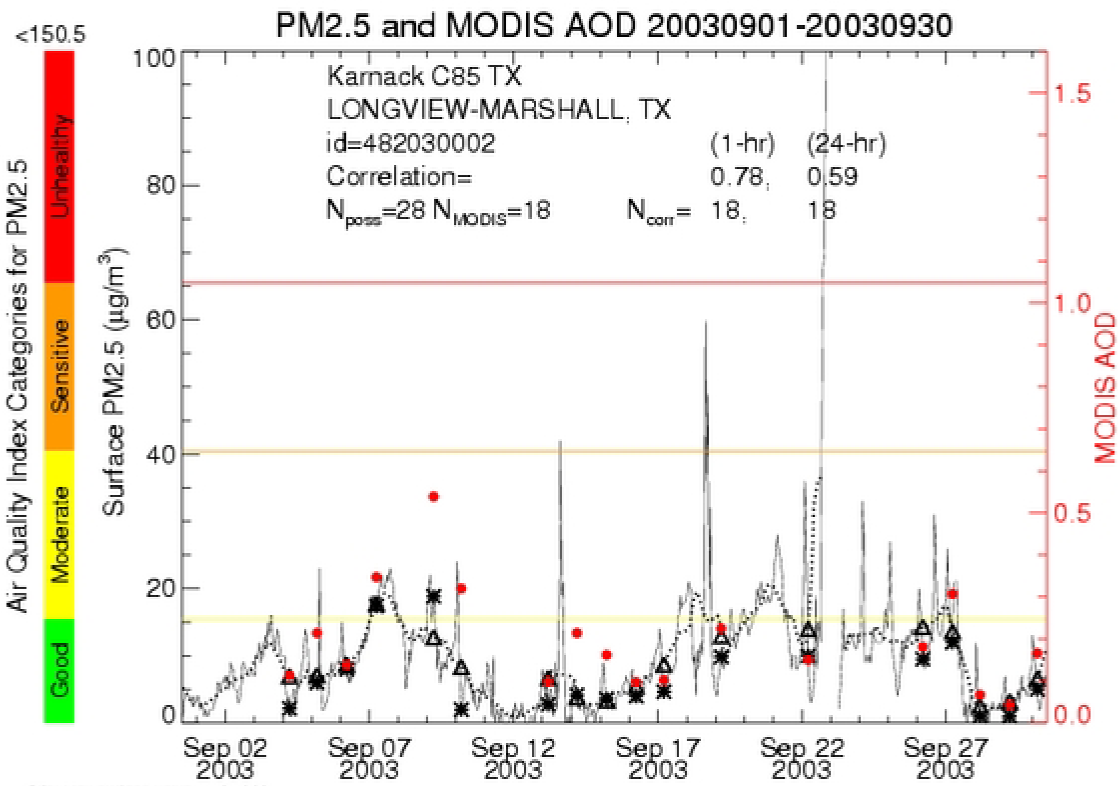

PM2.5 and MODIS AOD 20030901-20030930
Houston East C1 TX
HOUSTON, TX
id=482011034
(1-hr) (24-hr)
Correlation= 0.62; 0.33
N_{poss}=27 N_{MODIS}=11 N_{corr}= 11; 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

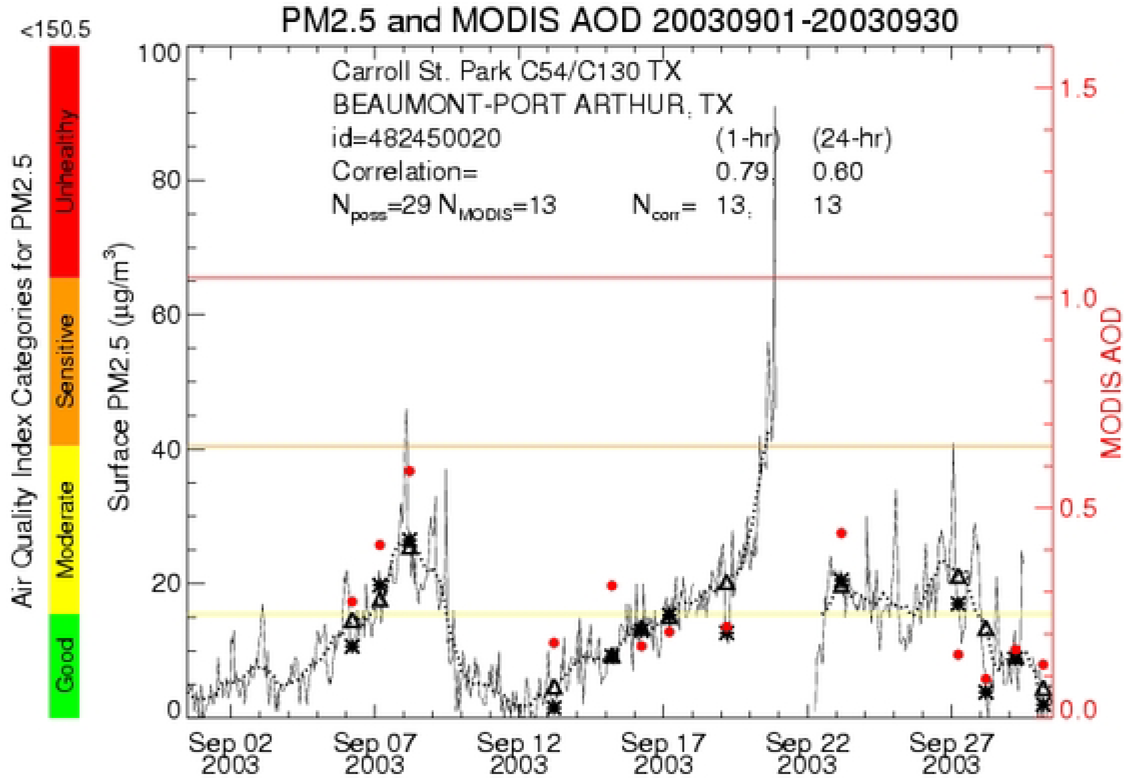

PM2.5 and MODIS AOD 20030901-20030930
Clinton C403/C113/C304 TX
HOUSTON, TX
id=482011035
(1-hr) (24-hr)
Correlation= 0.40; 0.20
N_{poss}=27 N_{MODIS}=9 N_{corr}= 9; 9
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

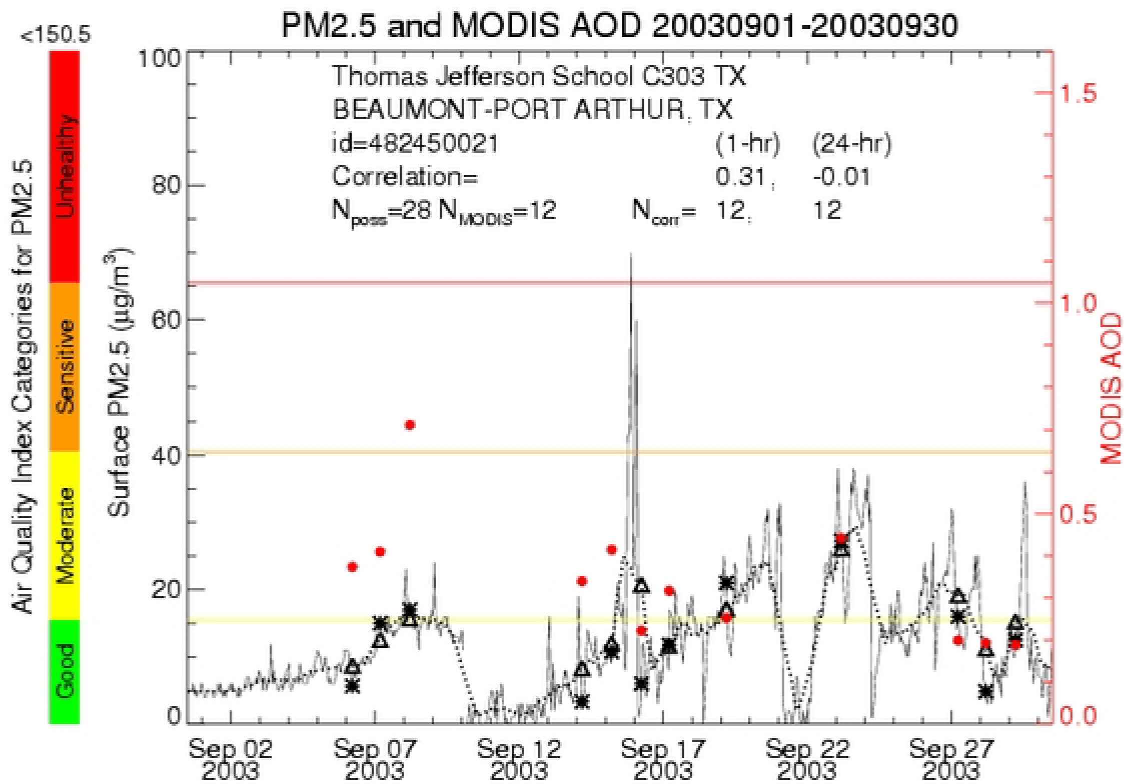

PM2.5 and MODIS AOD 20030901-20030930
Houston Deer Park 2 C35/C139 [H] TX
HOUSTON, TX
id=482011039
(1-hr) (24-hr)
Correlation= 0.24, -0.49
N_poss=27 N_MODIS=9 N_corr= 8, 6
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

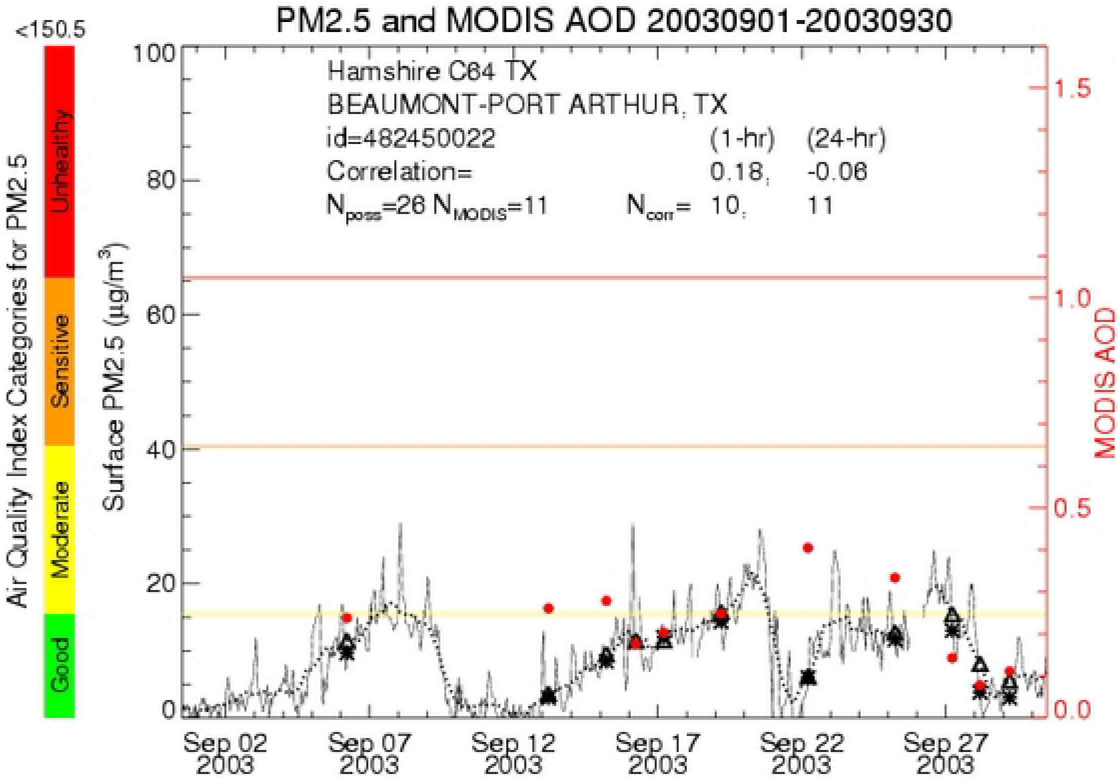

PM2.5 and MODIS AOD 20030901-20030930
Kingwood C309 TX
HOUSTON, TX
id=482011042
(1-hr) (24-hr)
Correlation= 0.34, 0.37
N_poss=27 N_MODIS=12 N_corr= 7, 6
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

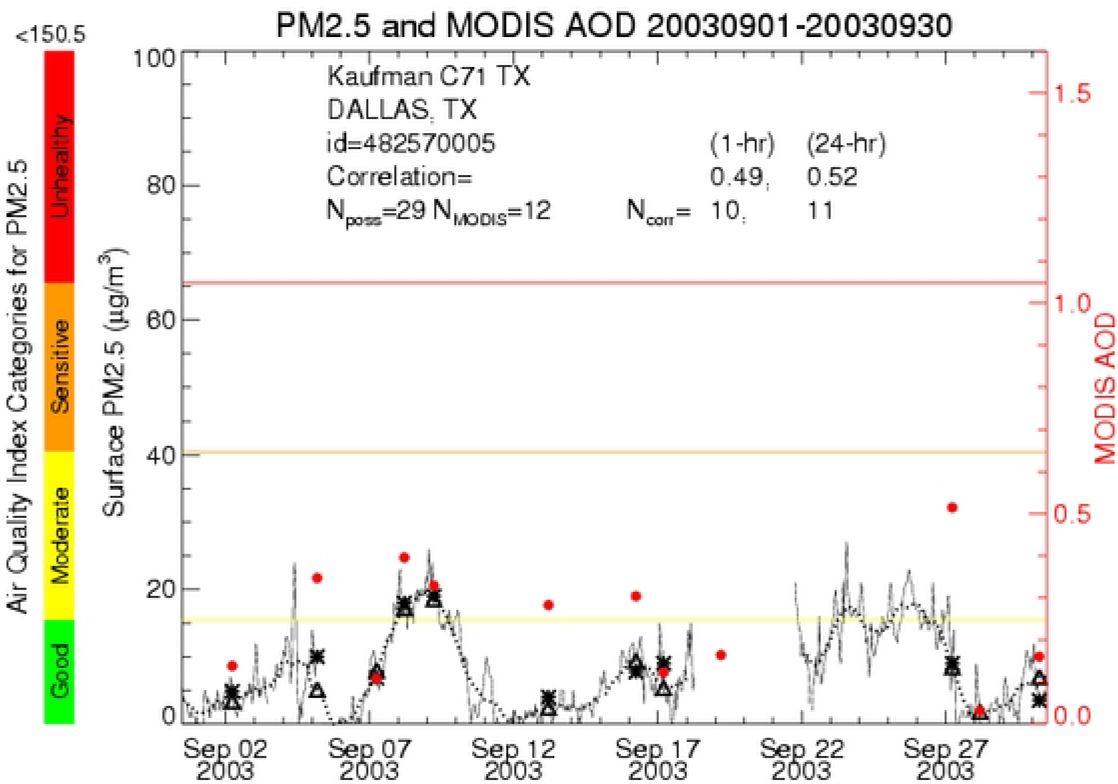

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Seabrook Friendship Park C45 TX
HOUSTON, TX
id=482011050
(1-hr) (24-hr)
Correlation= -0.27, -0.21
Nposs=27 NMODIS=12 Ncorr= 7, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

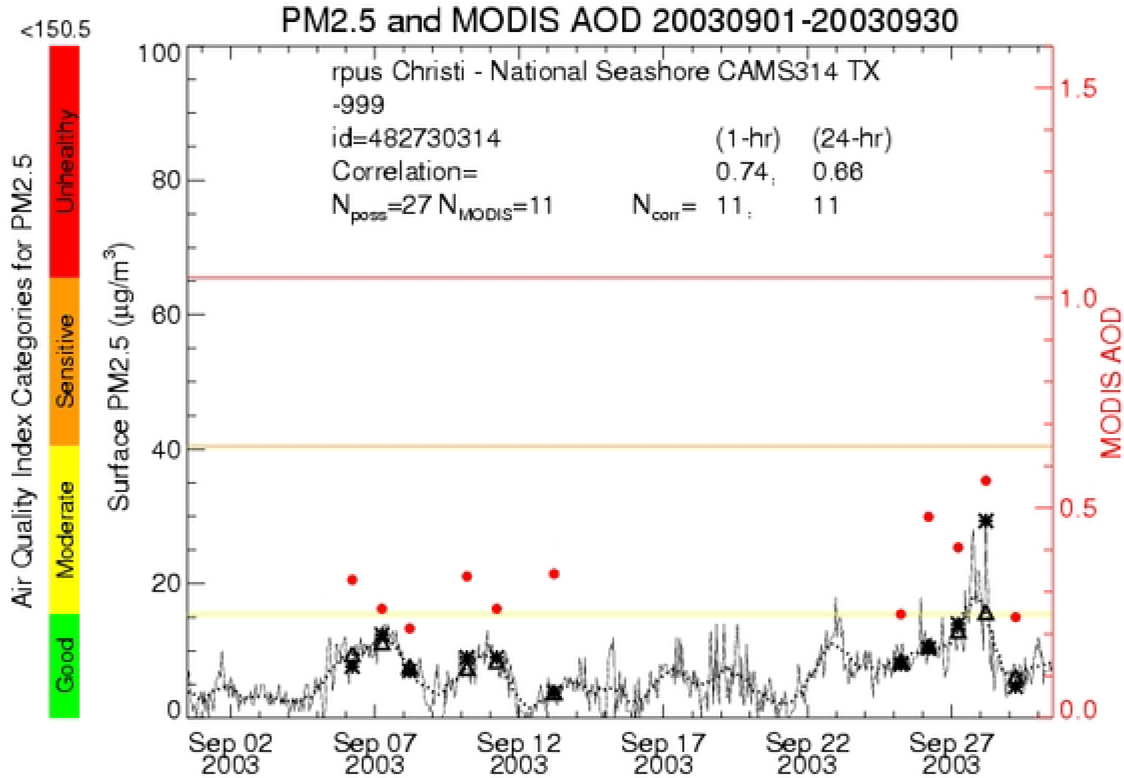

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Karnack C85 TX
LONGVIEW-MARSHALL, TX
id=482030002
(1-hr) (24-hr)
Correlation= 0.78, 0.59
Nposs=28 NMODIS=18 Ncorr= 18, 18
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 161.000

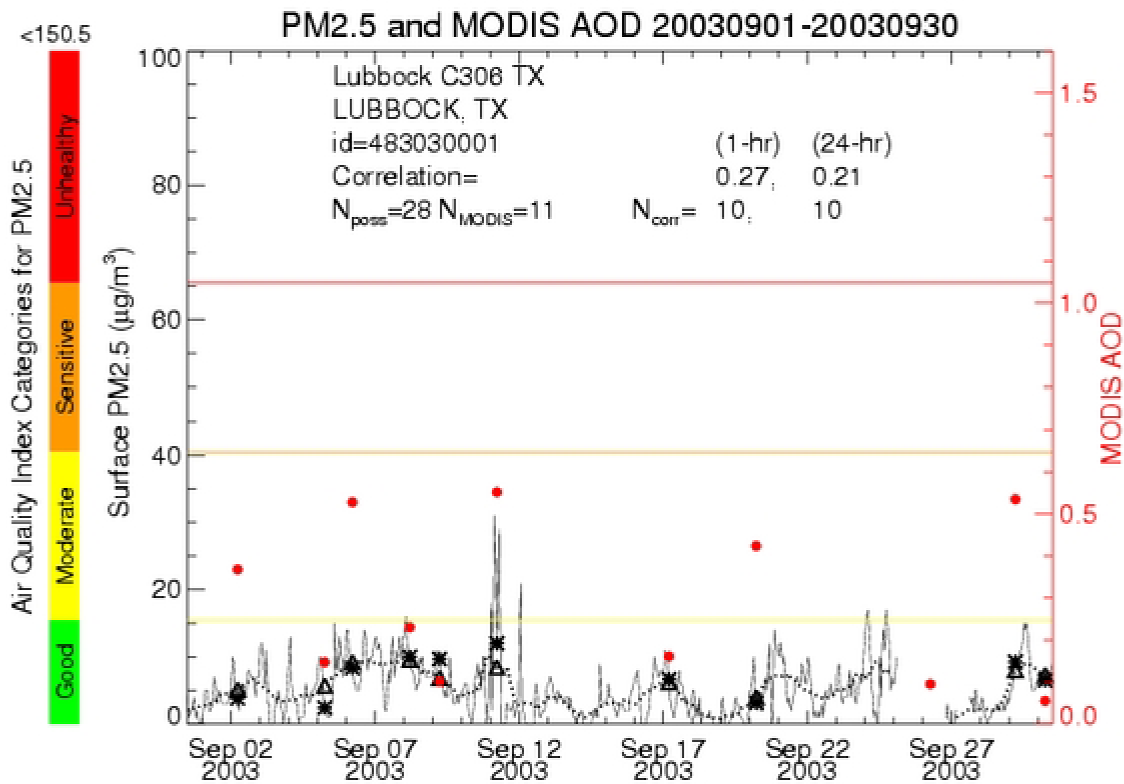

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Carroll St. Park C54/C130 TX
BEAUMONT-PORT ARTHUR, TX
id=482450020 (1-hr) (24-hr)
Correlation= 0.79, 0.60
N_{poss}=29 N_{MODIS}=13 N_{corr}= 13, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

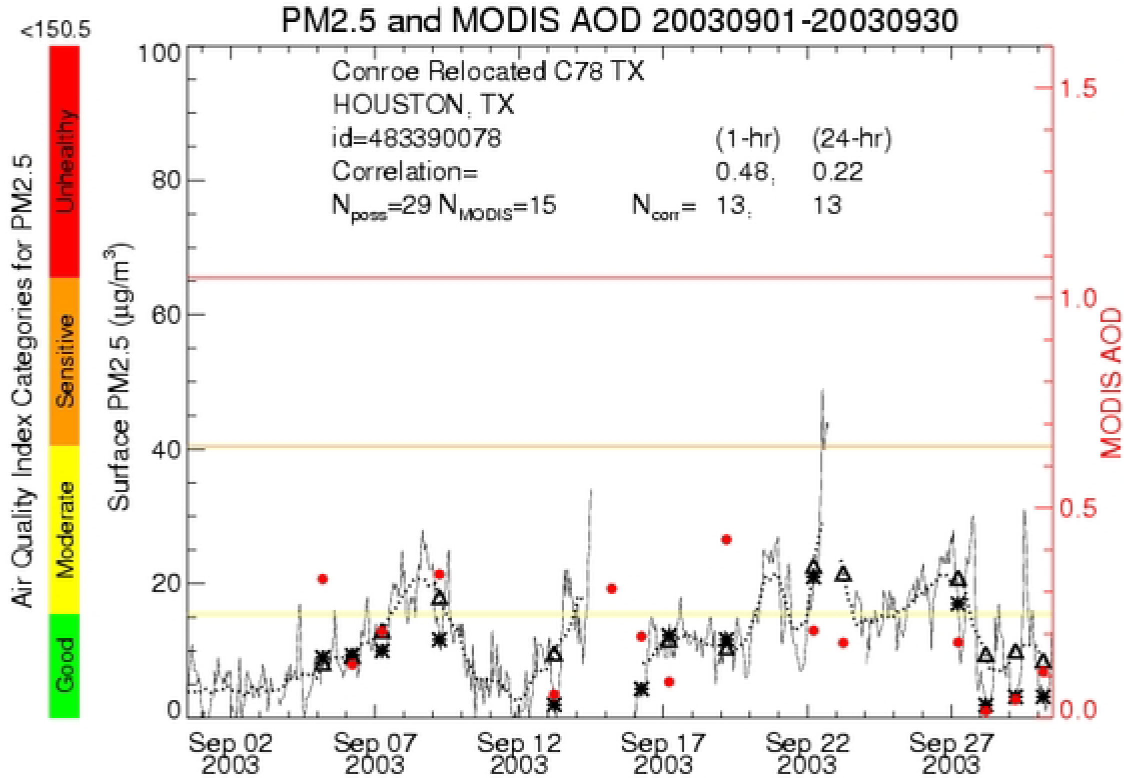

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Thomas Jefferson School C303 TX
BEAUMONT-PORT ARTHUR, TX
id=482450021 (1-hr) (24-hr)
Correlation= 0.31, -0.01
N_{poss}=28 N_{MODIS}=12 N_{corr}= 12, 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

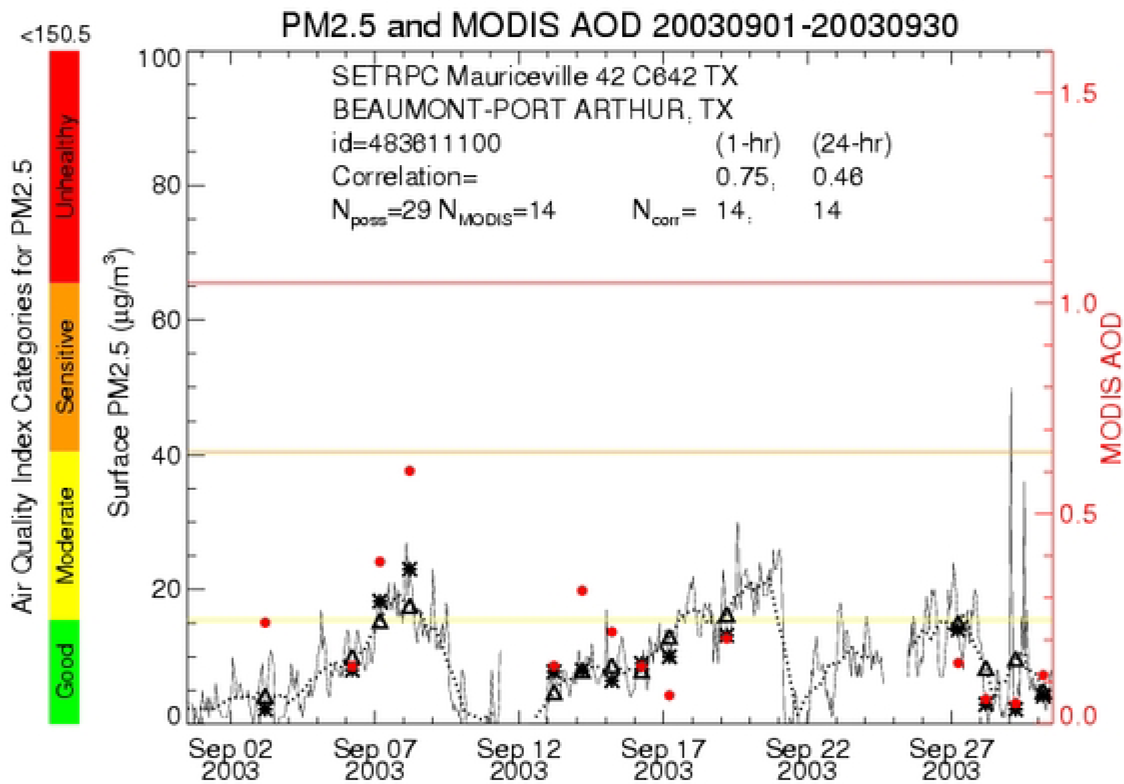

PM2.5 and MODIS AOD 20030901-20030930
Hamshire C64 TX
BEAUMONT-PORT ARTHUR, TX
id=482450022 (1-hr) (24-hr)
Correlation= 0.18, -0.06
N_{poss}=26 N_{MODIS}=11 N_{corr}= 10, 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

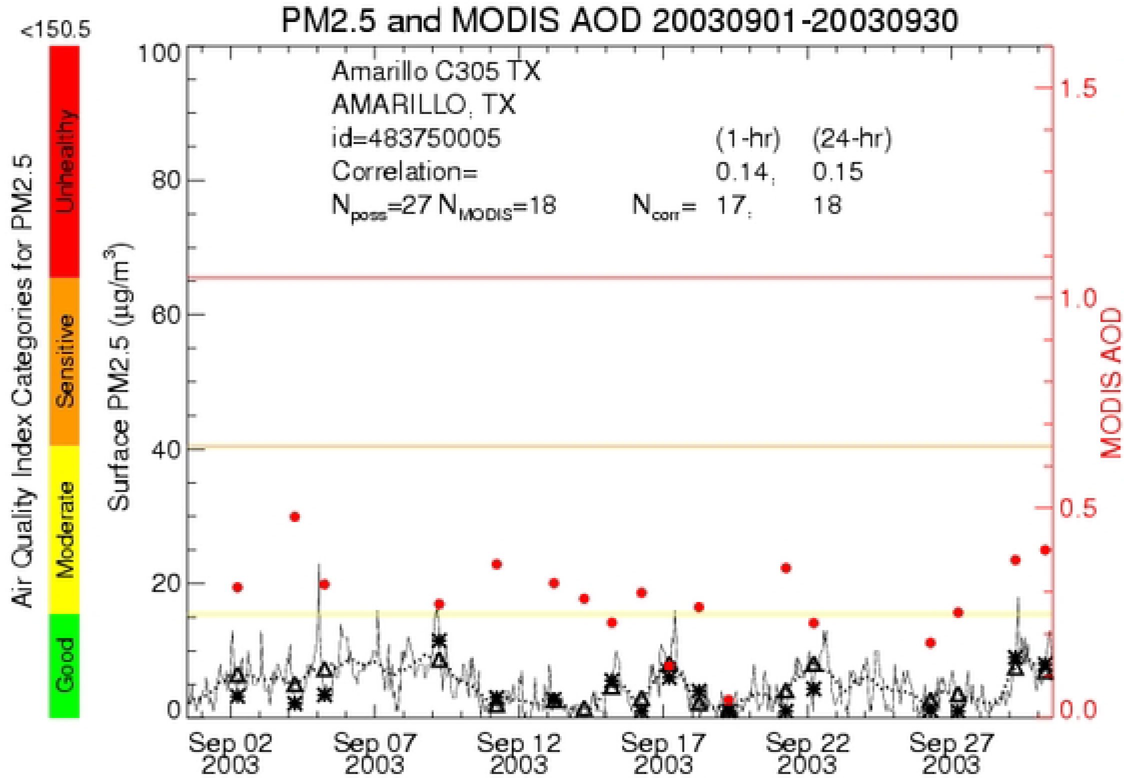

PM2.5 and MODIS AOD 20030901-20030930
Kaufman C71 TX
DALLAS, TX
id=482570005 (1-hr) (24-hr)
Correlation= 0.49, 0.52
N_{poss}=29 N_{MODIS}=12 N_{corr}= 10, 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
rpus Christi - National Seashore CAMS314 TX
-999
id=482730314
(1-hr) (24-hr)
Correlation= 0.74; 0.66
Nposs=27 NMODIS=11 Ncorr= 11; 11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

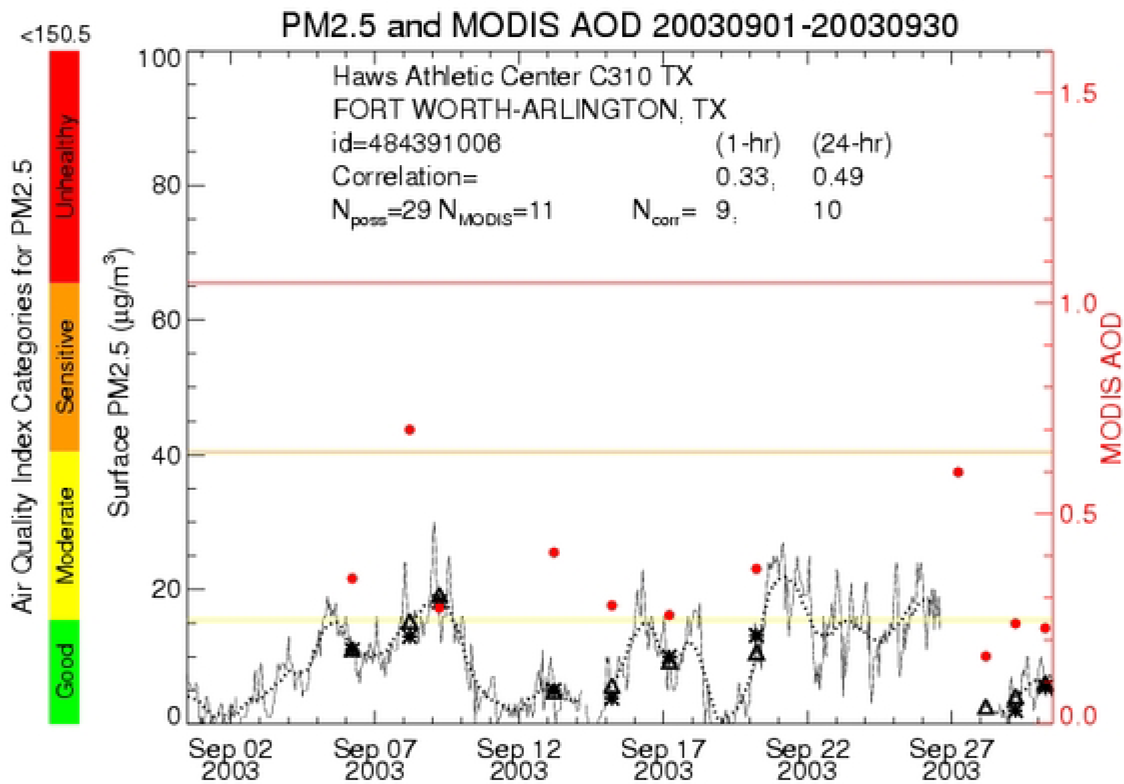

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Lubbock C306 TX
LUBBOCK, TX
id=483030001
(1-hr) (24-hr)
Correlation= 0.27; 0.21
Nposs=28 NMODIS=11 Ncorr= 10; 10
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Conroe Relocated C78 TX
HOUSTON, TX
id=483390078
(1-hr)
(24-hr)
Correlation=
0.48,
0.22
N_poss=29 N_MODIS=15
N_corr=
13,
13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

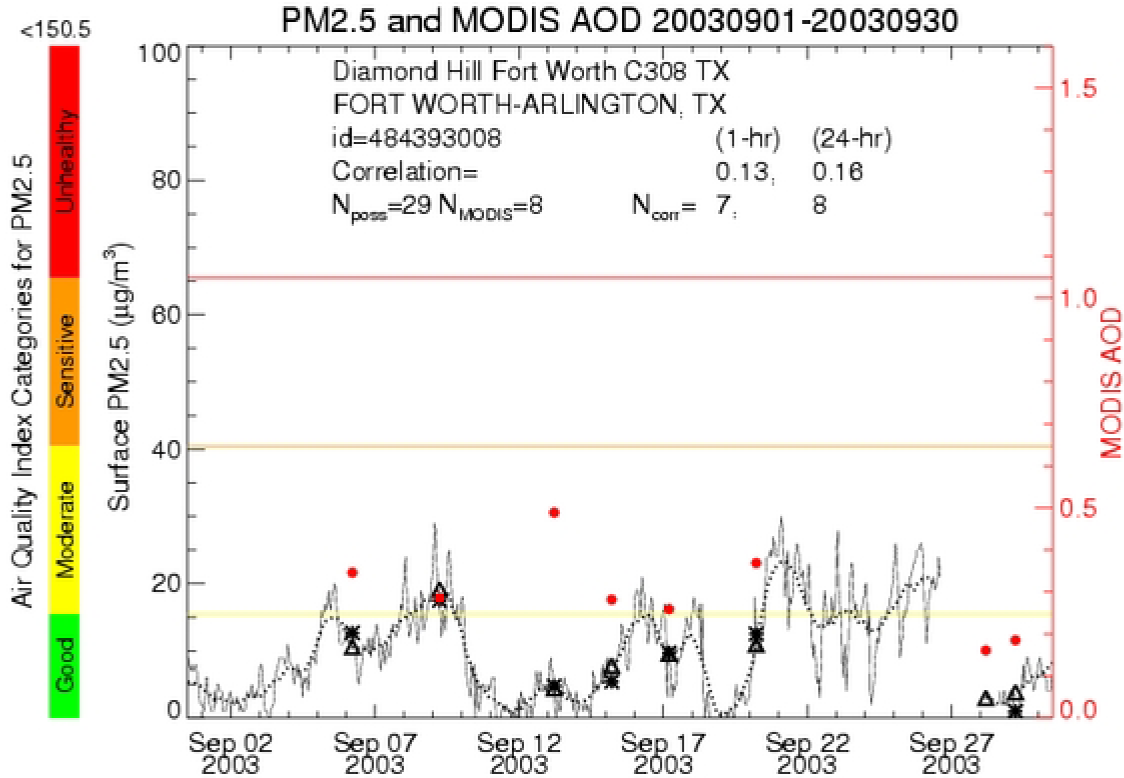

PM2.5 and MODIS AOD 20030901-20030930
SETRPC Mauriceville 42 C642 TX
BEAUMONT-PORT ARTHUR, TX
id=483611100
(1-hr)
(24-hr)
Correlation=
0.75,
0.46
N_poss=29 N_MODIS=14
N_corr=
14,
14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



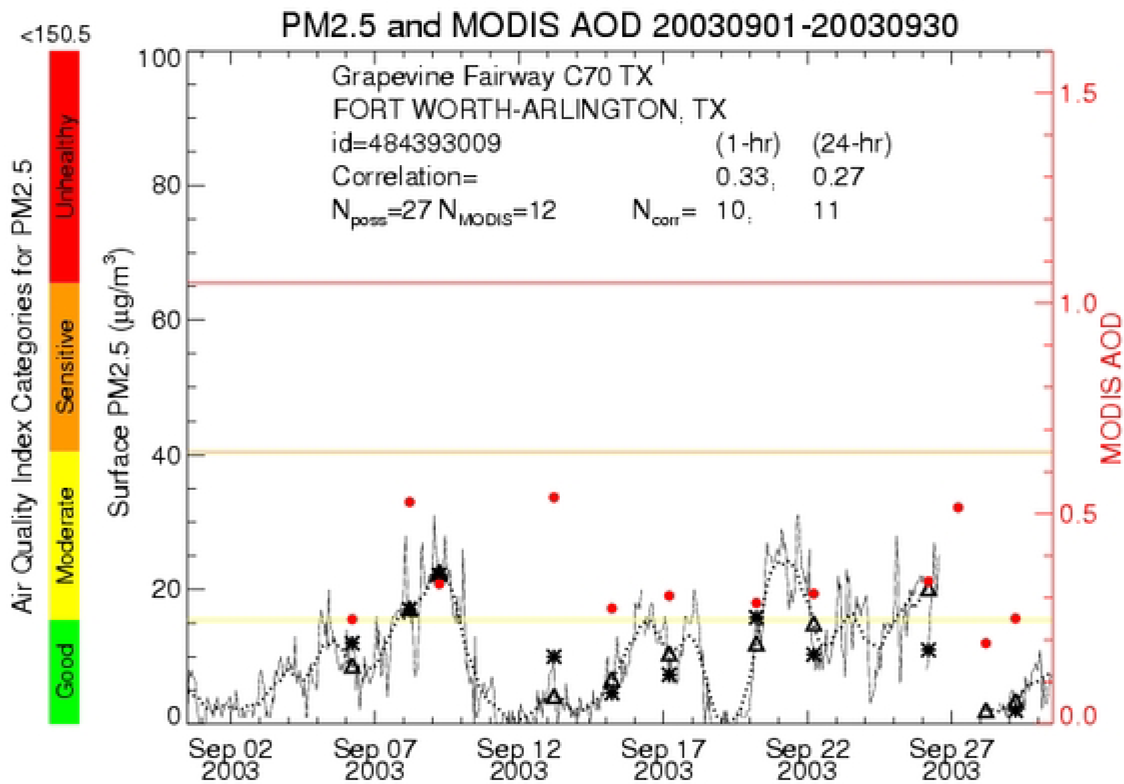
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Amarillo C305 TX
AMARILLO, TX
id=483750005 (1-hr) (24-hr)
Correlation= 0.14; 0.15
Nposs=27 NMODIS=18 Ncorr= 17; 18
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



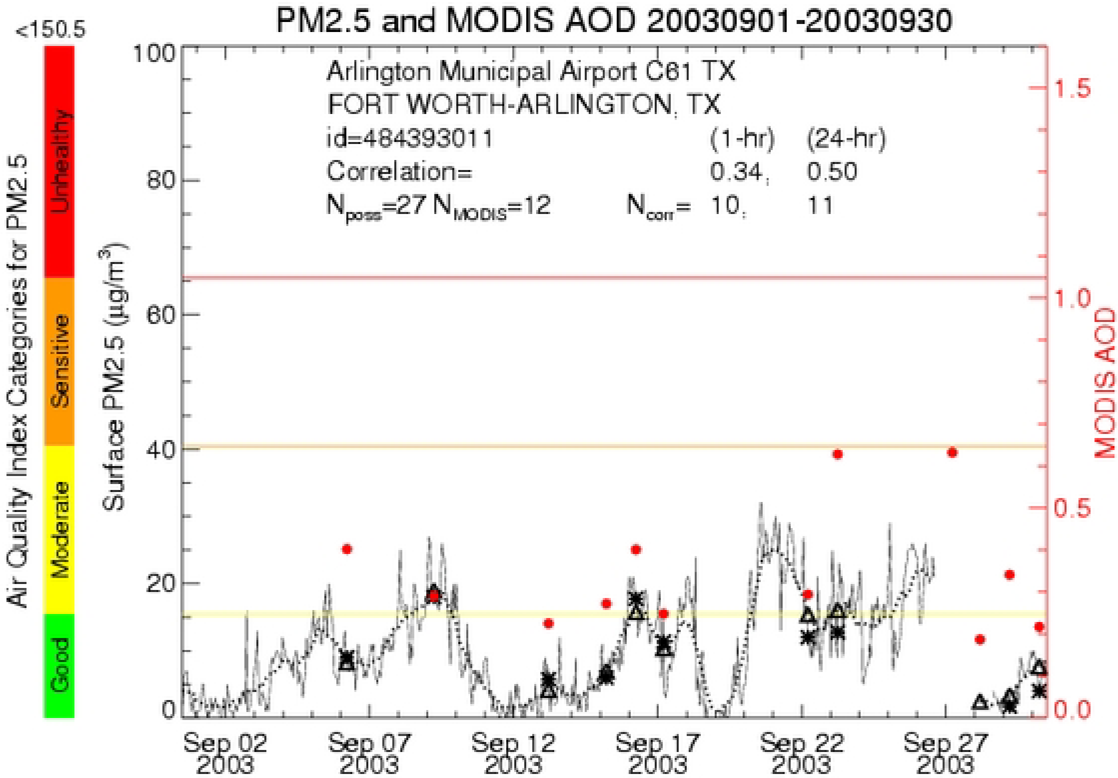
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Haws Athletic Center C310 TX
FORT WORTH-ARLINGTON, TX
id=484391006 (1-hr) (24-hr)
Correlation= 0.33; 0.49
Nposs=29 NMODIS=11 Ncorr= 9; 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



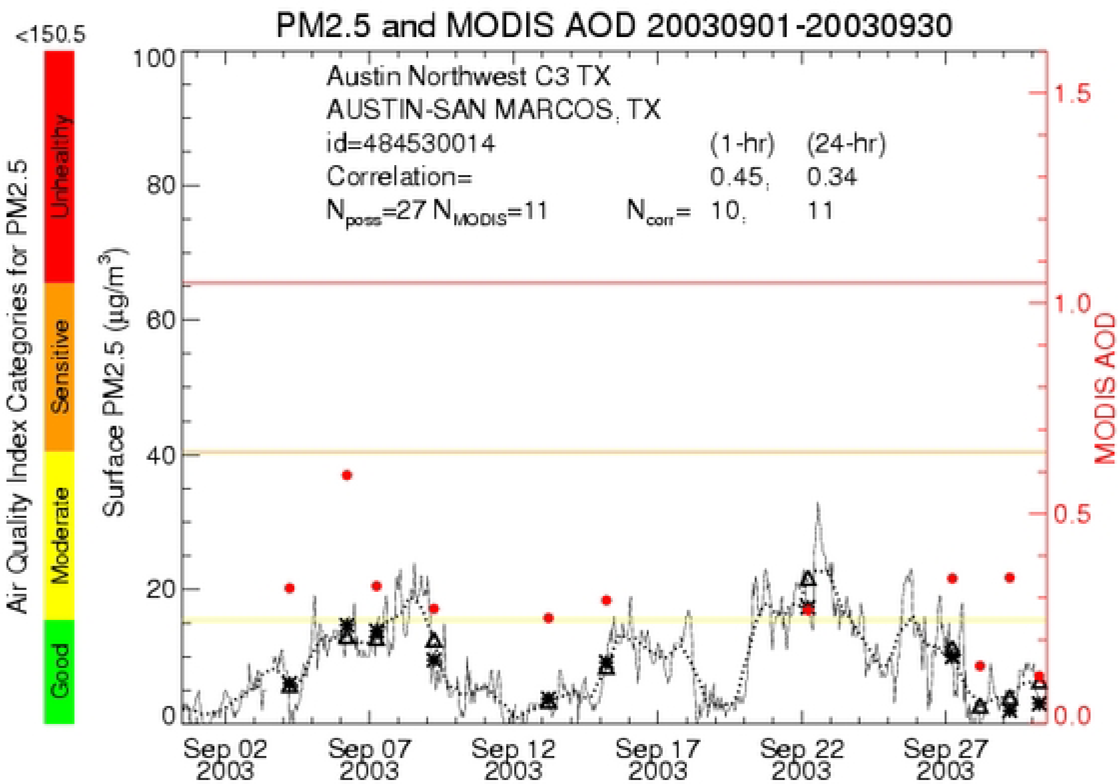
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Diamond Hill Fort Worth C308 TX
FORT WORTH-ARLINGTON, TX
id=484393008 (1-hr) (24-hr)
Correlation= 0.13, 0.16
N_poss=29 N_MODIS=8 N_corr= 7, 8
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



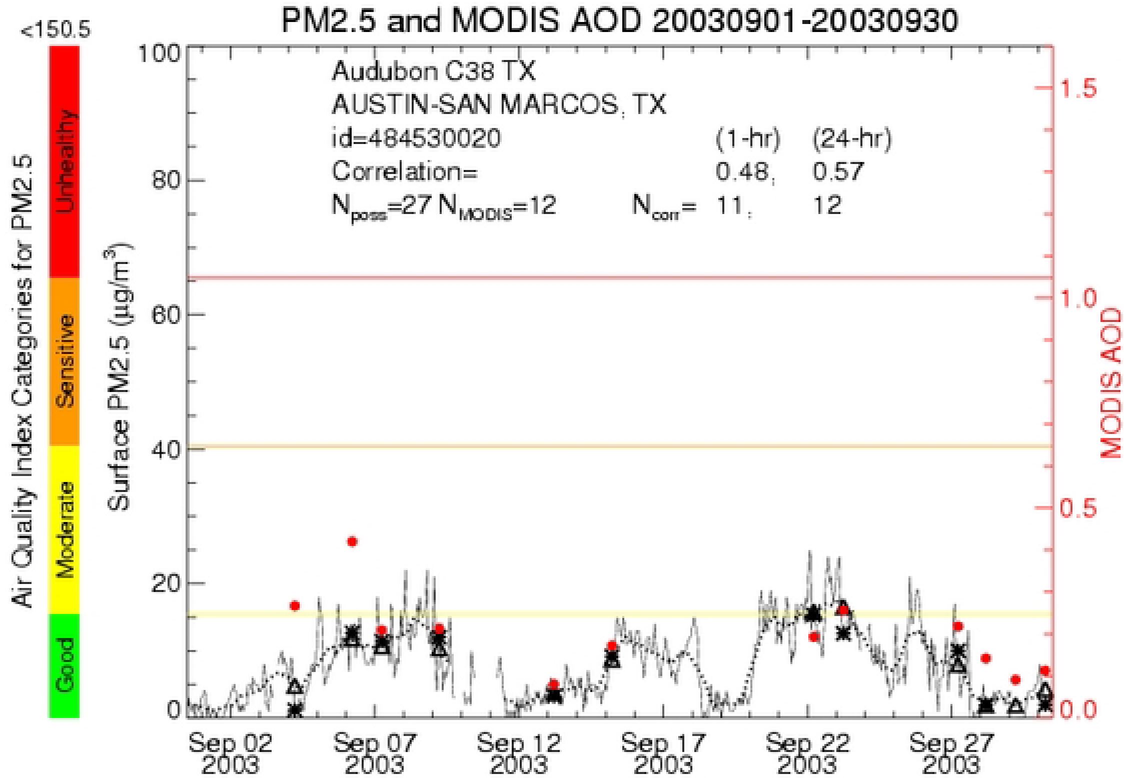
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Grapevine Fairway C70 TX
FORT WORTH-ARLINGTON, TX
id=484393009 (1-hr) (24-hr)
Correlation= 0.33, 0.27
N_poss=27 N_MODIS=12 N_corr= 10, 11
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



PM2.5 and MODIS AOD 20030901-20030930
Arlington Municipal Airport C61 TX
FORT WORTH-ARLINGTON, TX
id=484393011
(1-hr) (24-hr)
Correlation= 0.34, 0.50
N_poss=27 N_MODIS=12 N_corr= 10, 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

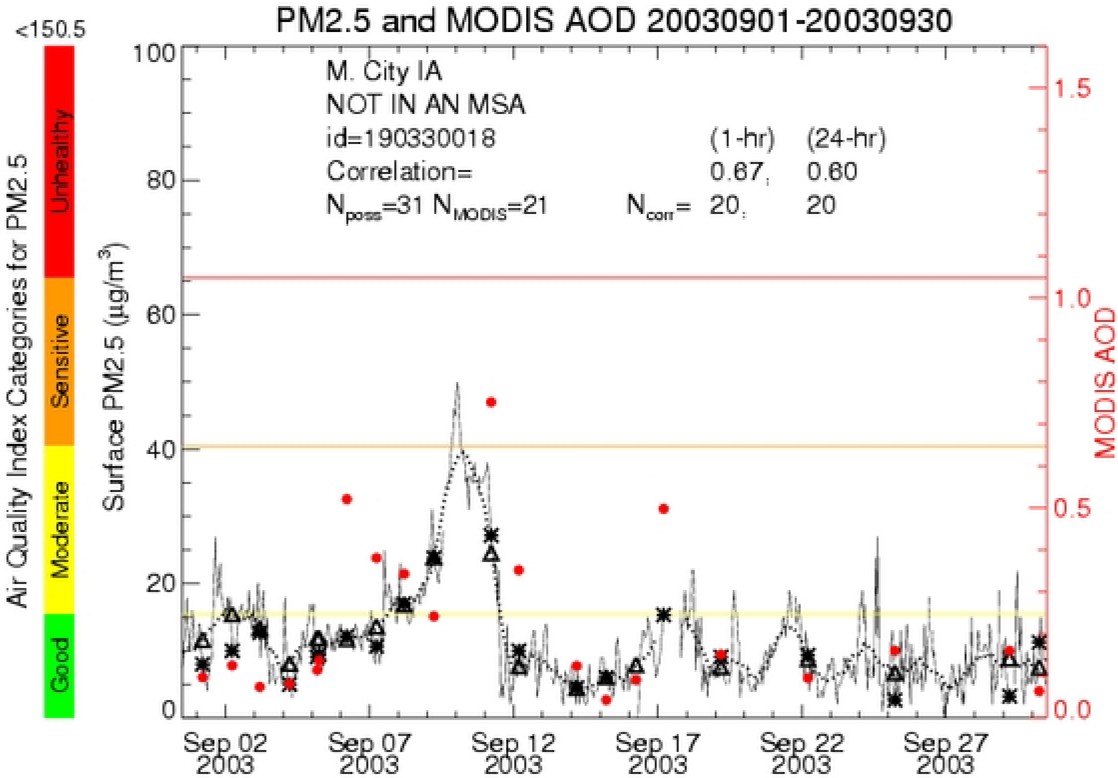


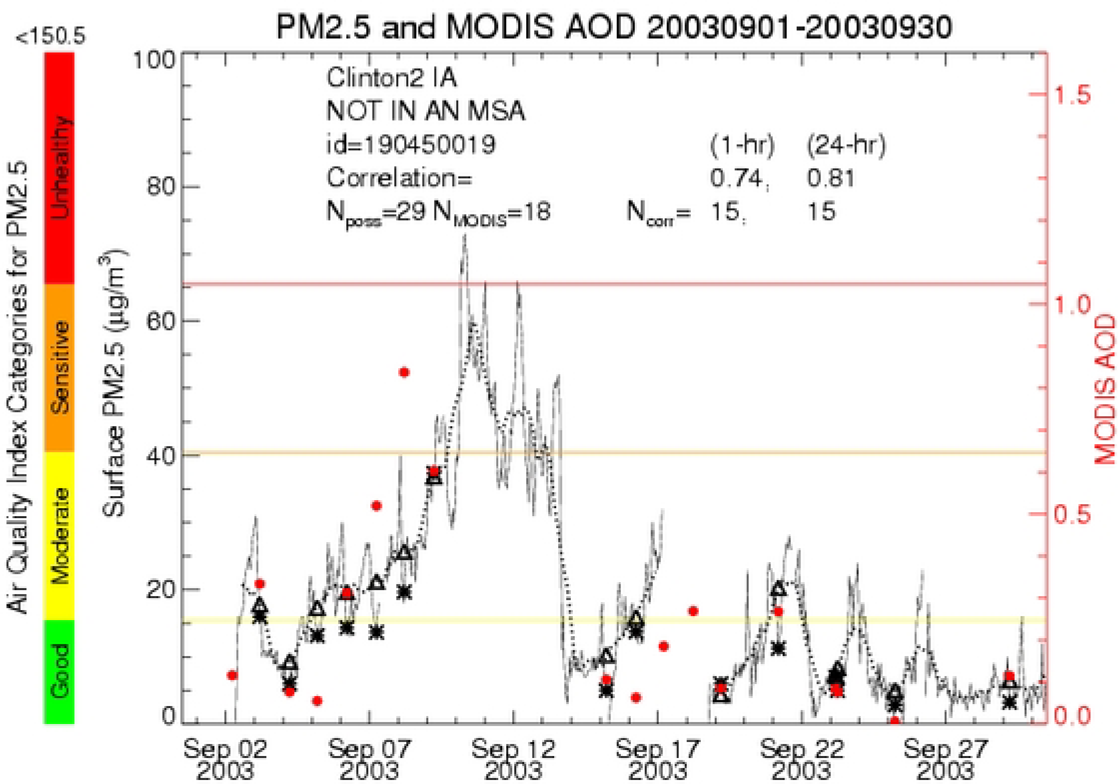
PM2.5 and MODIS AOD 20030901-20030930
Austin Northwest C3 TX
AUSTIN-SAN MARCOS, TX
id=484530014
(1-hr) (24-hr)
Correlation= 0.45, 0.34
N_poss=27 N_MODIS=11 N_corr= 10, 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

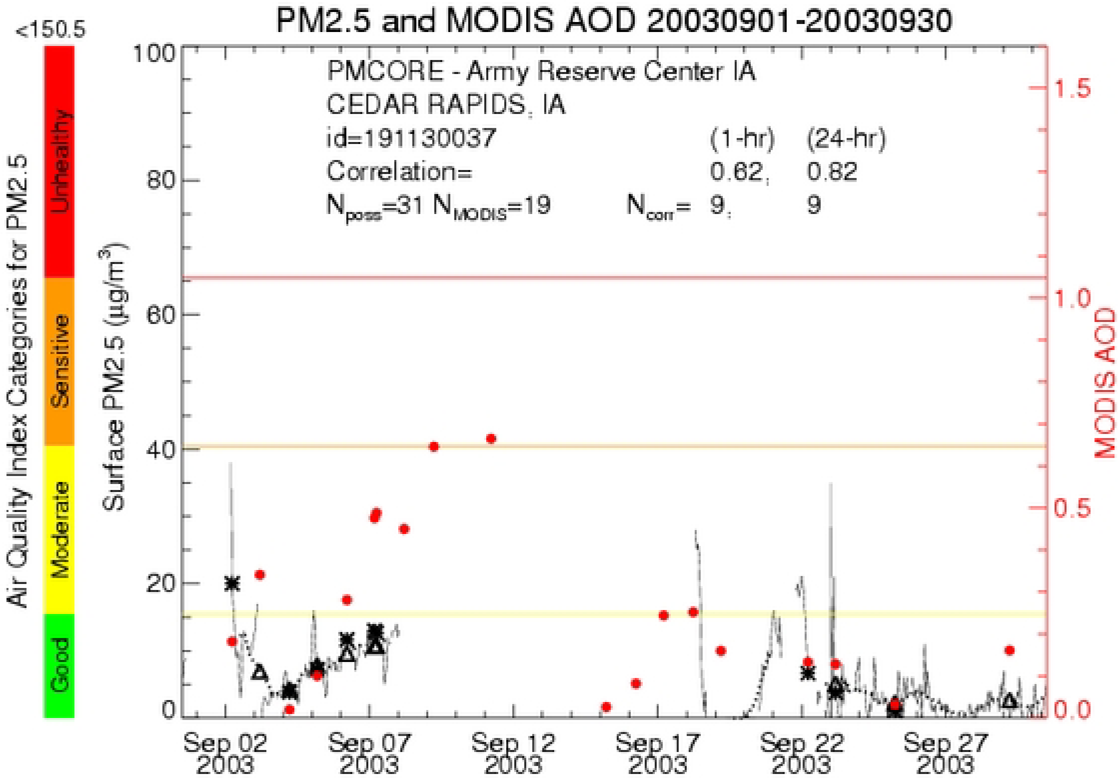


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Audubon C38 TX
AUSTIN-SAN MARCOS, TX
id=484530020
(1-hr) (24-hr)
Correlation= 0.48, 0.57
Nposs=27 NMODIS=12 Ncorr= 11, 12
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

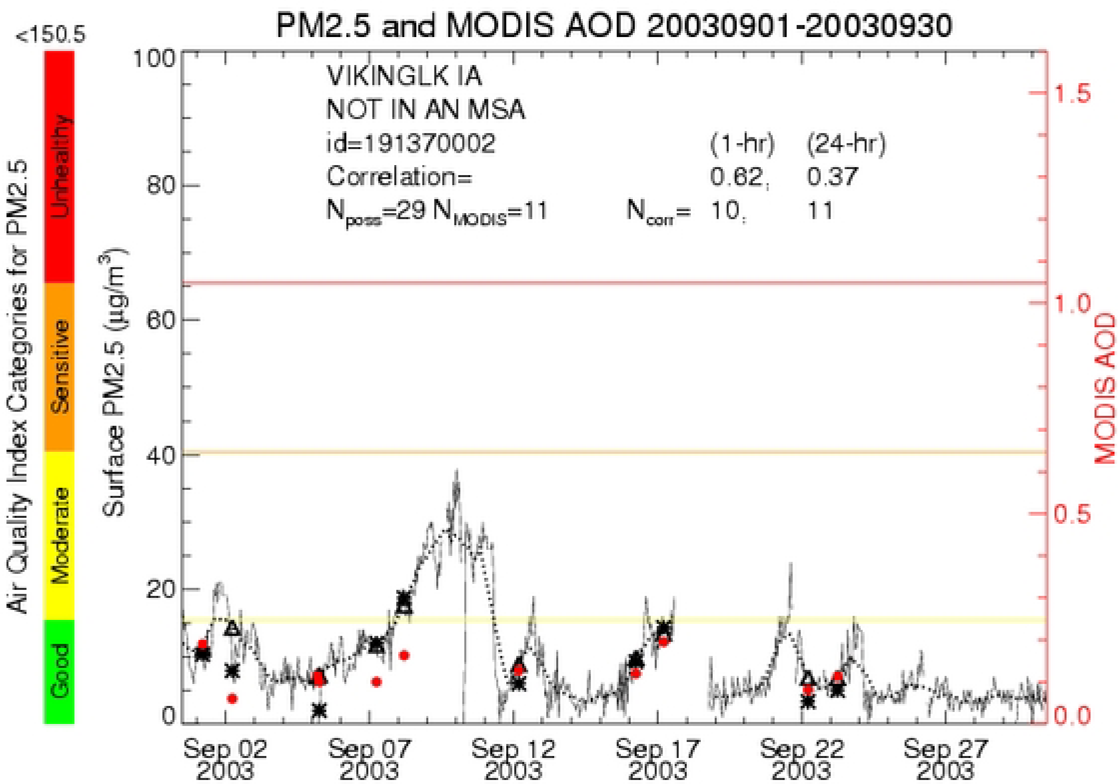
Region 7


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
M. City IA
NOT IN AN MSA
id=190330018
(1-hr) (24-hr)
Correlation= 0.67; 0.60
Nposs=31 NMODIS=21 Ncorr= 20; 20
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

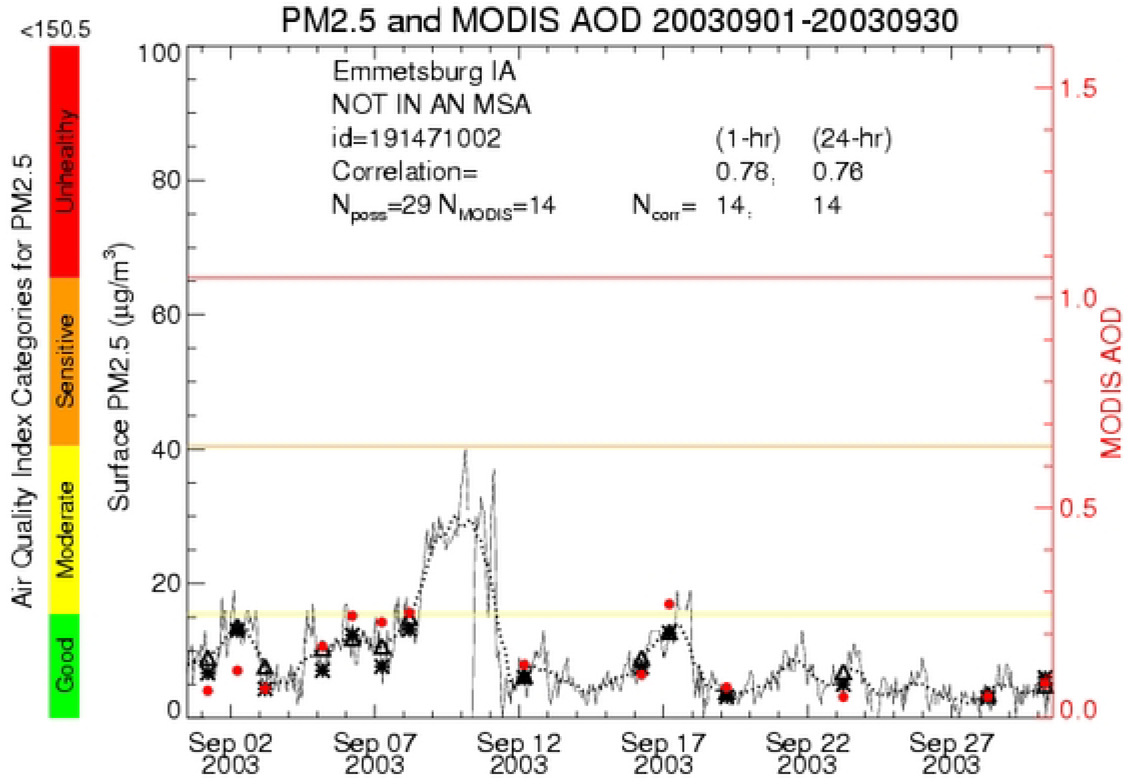

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Clinton2 IA
NOT IN AN MSA
id=190450019
(1-hr) (24-hr)
Correlation= 0.74; 0.81
Nposs=29 NMODIS=18 Ncorr= 15; 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

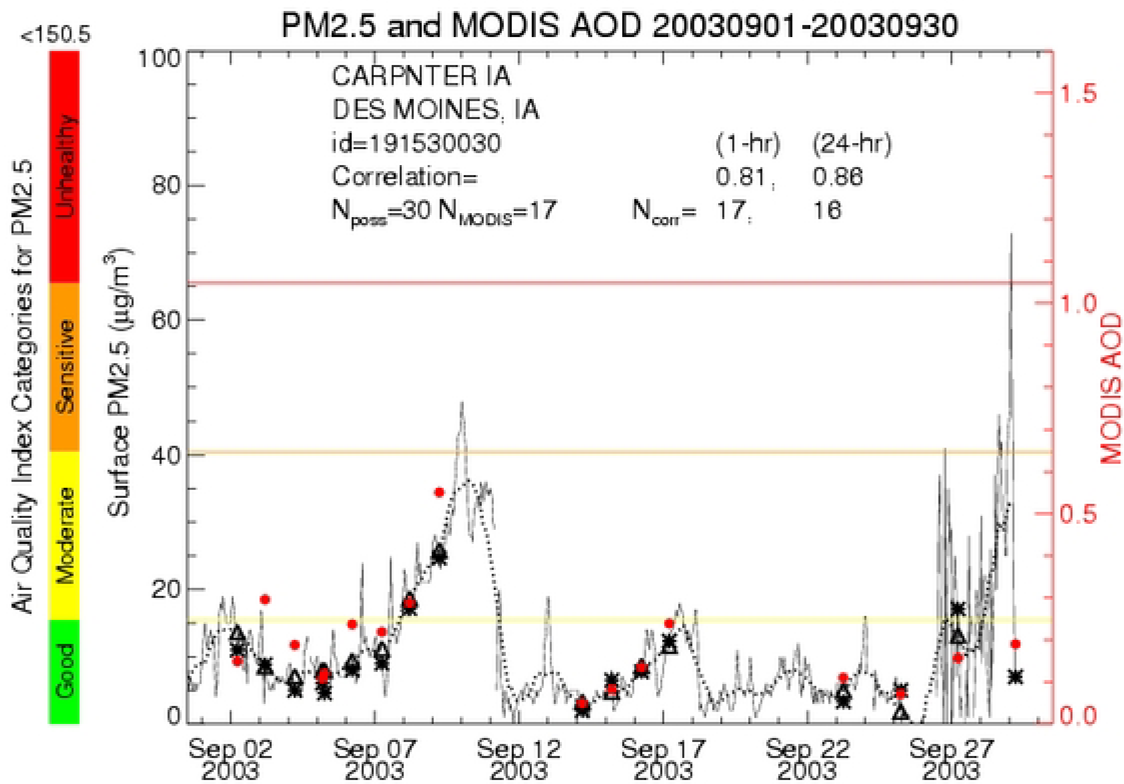


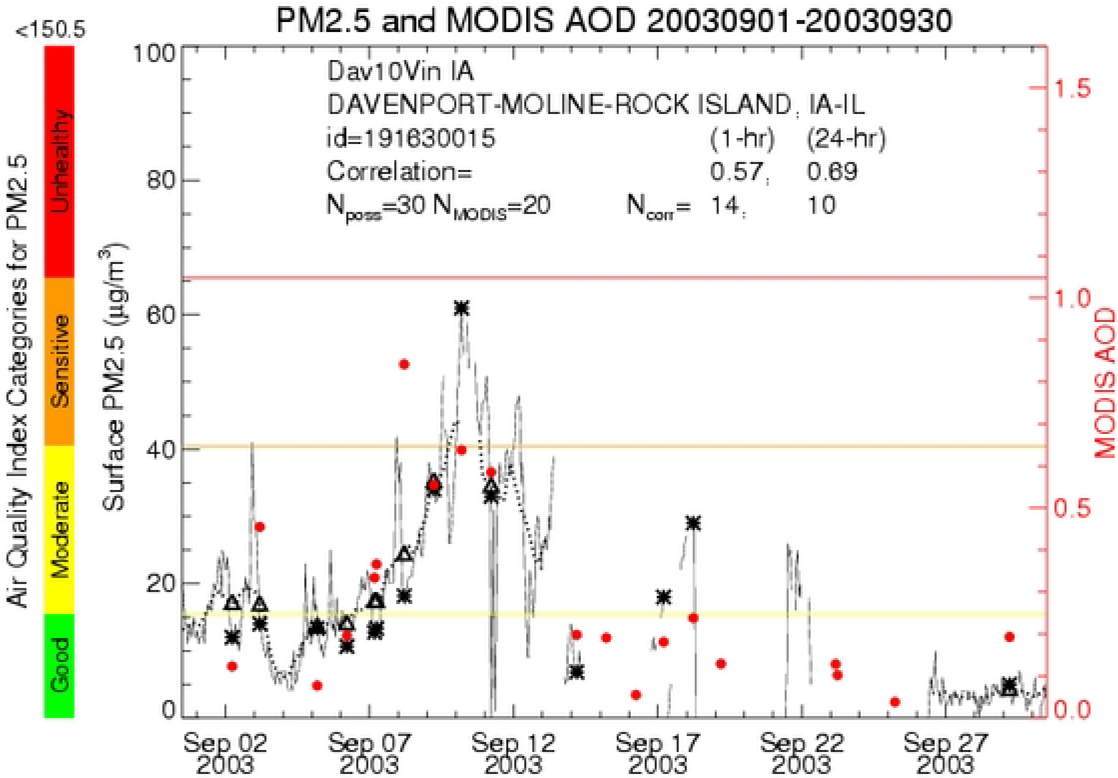
PM2.5 and MODIS AOD 20030901-20030930
PMCORE - Army Reserve Center IA
CEDAR RAPIDS, IA
id=191130037
(1-hr) (24-hr)
Correlation= 0.62, 0.82
N_{poss}=31 N_{MODIS}=19 N_{corr}= 9, 9
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

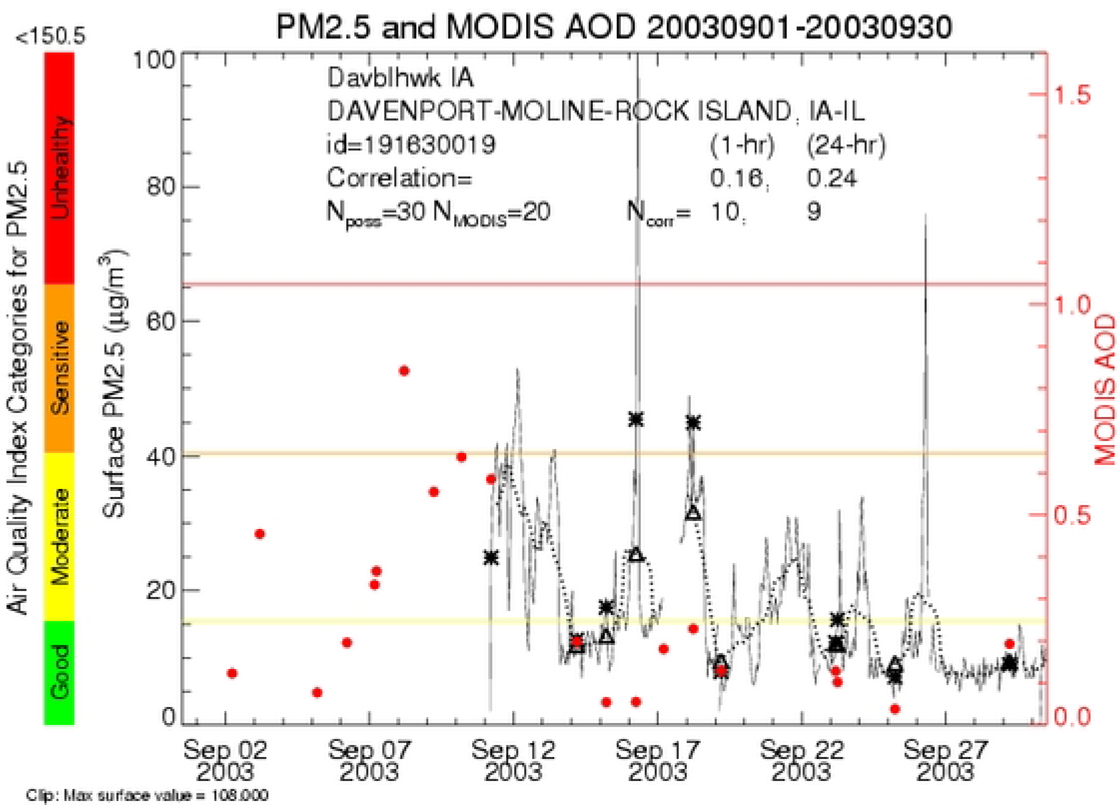


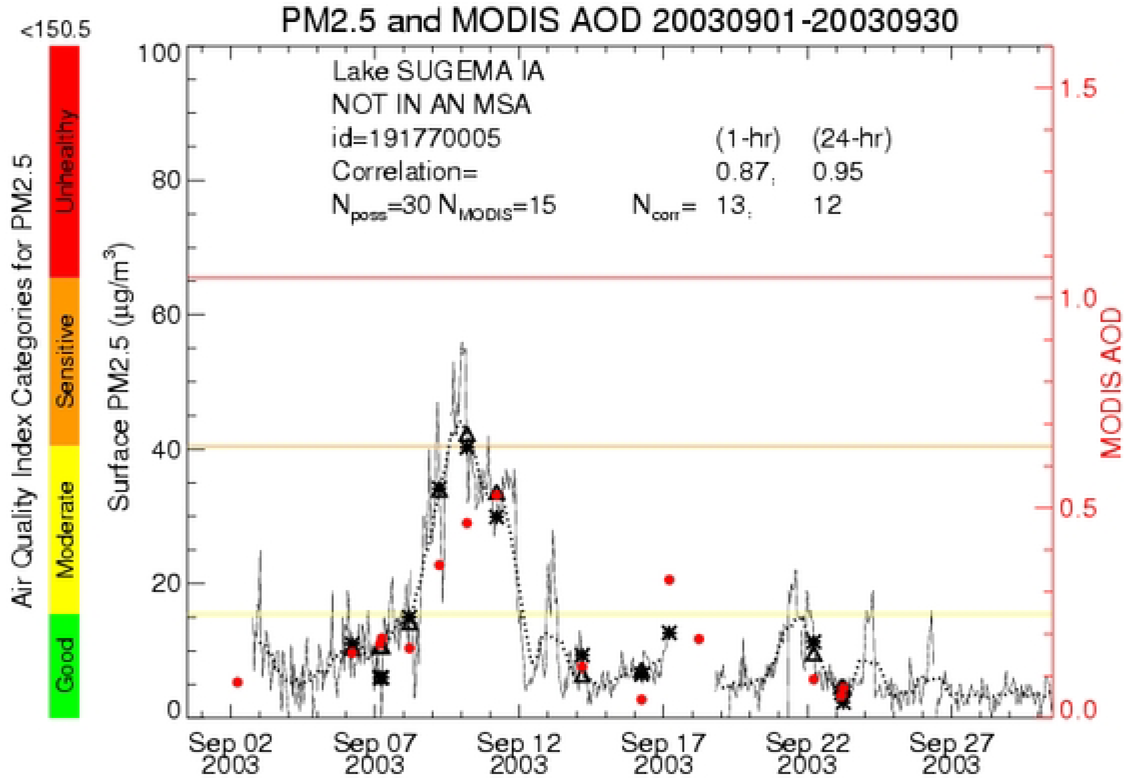
PM2.5 and MODIS AOD 20030901-20030930
VIKINGLK IA
NOT IN AN MSA
id=191370002
(1-hr) (24-hr)
Correlation= 0.62, 0.37
N_{poss}=29 N_{MODIS}=11 N_{corr}= 10, 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Emmetsburg IA
NOT IN AN MSA
id=191471002
Correlation=
(1-hr) (24-hr)
0.78; 0.76
Nposs=29 NMODIS=14
Ncorr= 14; 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

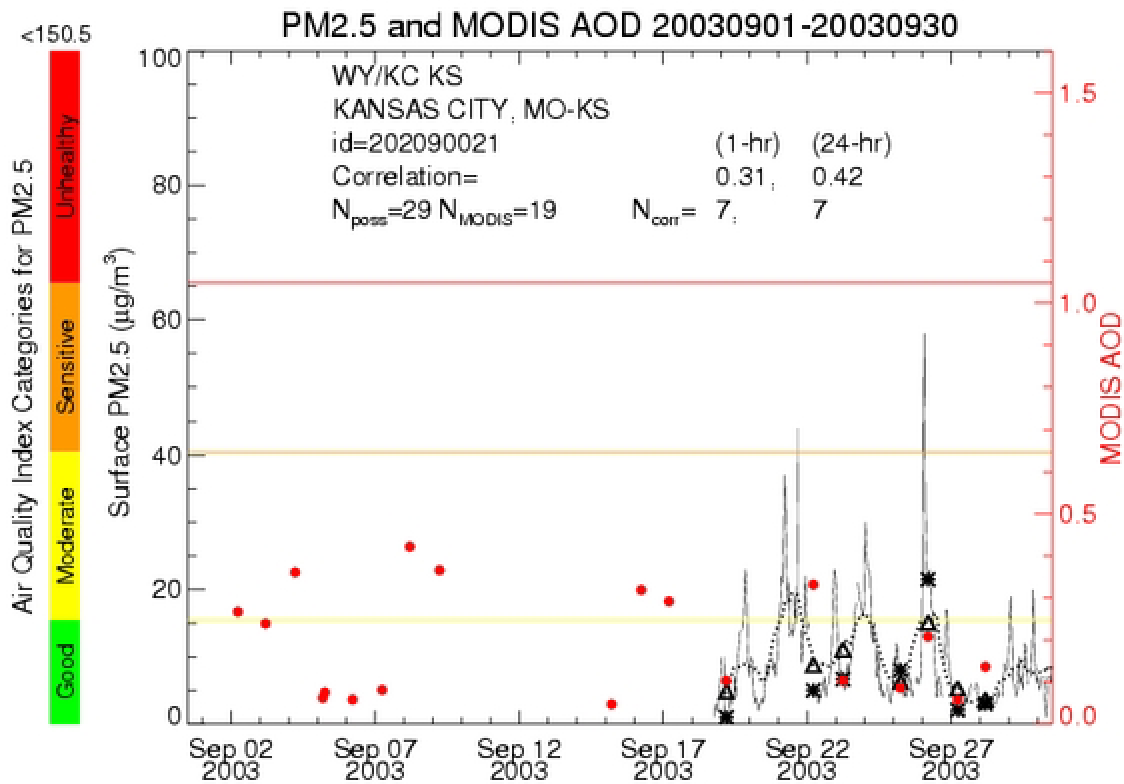

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
CARPNTER IA
DES MOINES, IA
id=191530030
Correlation=
(1-hr) (24-hr)
0.81; 0.86
Nposs=30 NMODIS=17
Ncorr= 17; 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Dav10Vin IA
DAVENPORT-MOLINE-ROCK ISLAND; IA-IL
id=191630015 (1-hr) (24-hr)
Correlation= 0.57; 0.69
Nposs=30 NMODIS=20 Ncorr= 14; 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

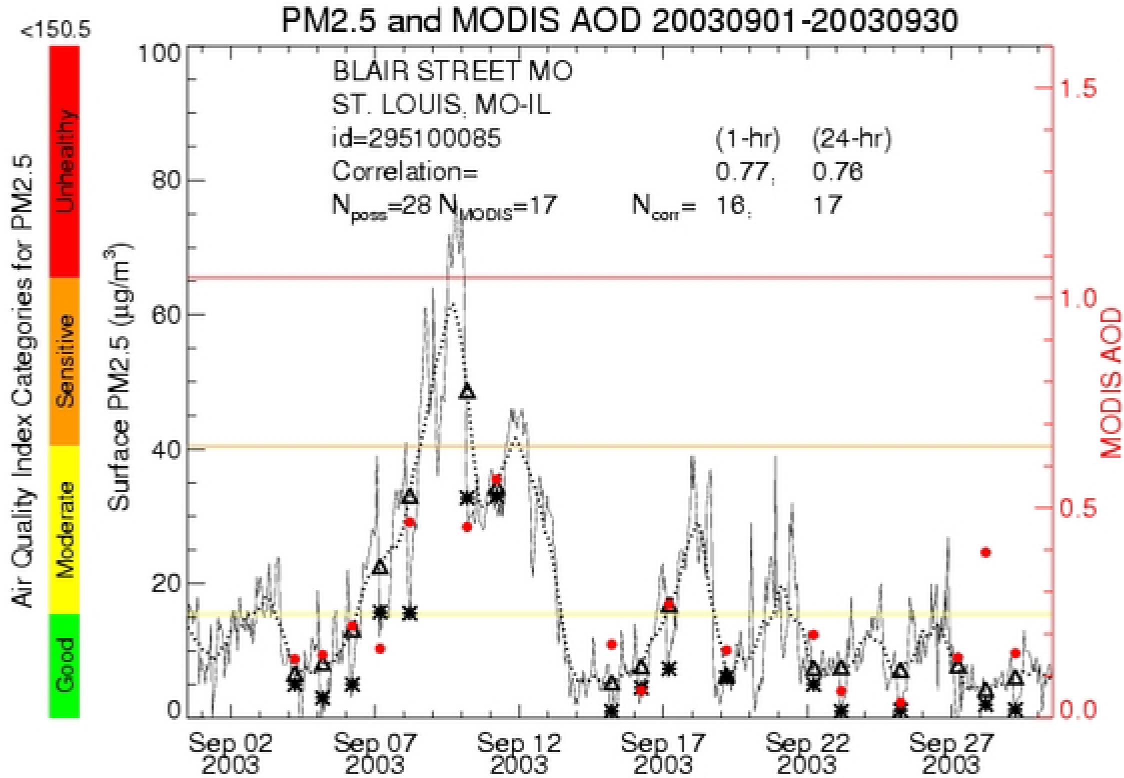

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Davblhwk IA
DAVENPORT-MOLINE-ROCK ISLAND; IA-IL
id=191630019 (1-hr) (24-hr)
Correlation= 0.16; 0.24
Nposs=30 NMODIS=20 Ncorr= 10; 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 108.000



PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Lake SUGEMA IA
NOT IN AN MSA
id=191770005
(1-hr) (24-hr)
Correlation= 0.87, 0.95
N_poss=30 N_MODIS=15 N_corr= 13, 12
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

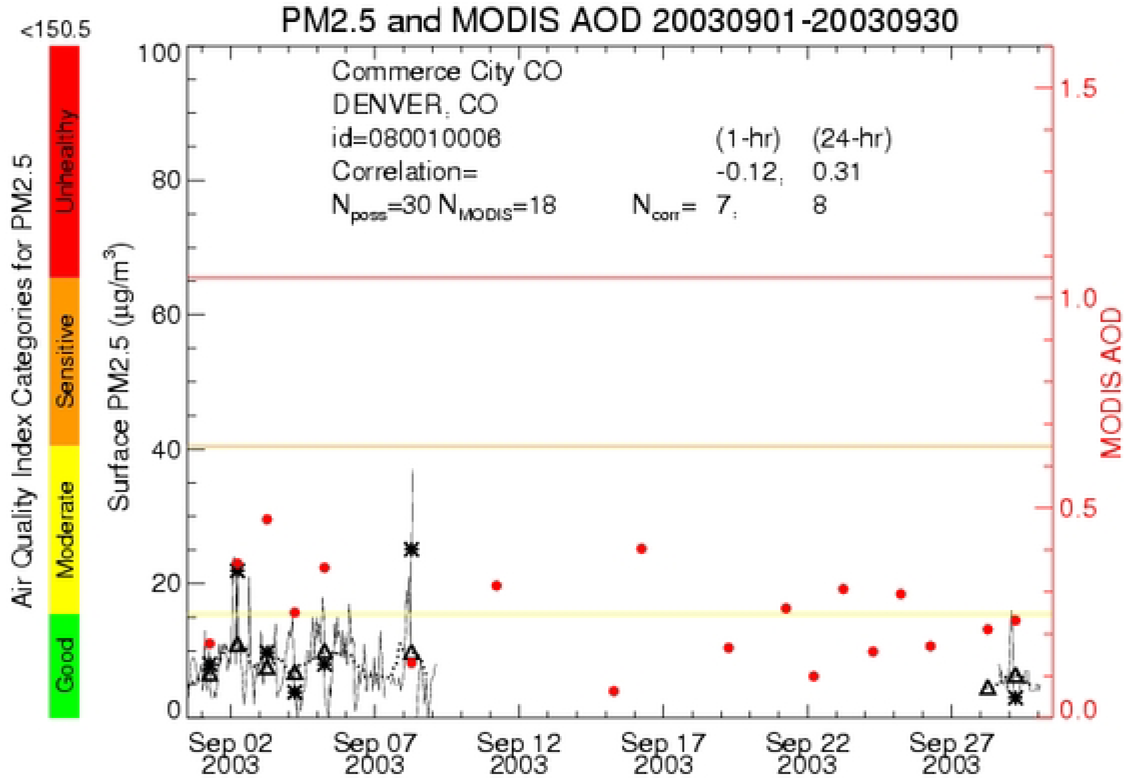


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
WY/KC KS
KANSAS CITY, MO-KS
id=202090021
(1-hr) (24-hr)
Correlation= 0.31, 0.42
N_poss=29 N_MODIS=19 N_corr= 7, 7
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

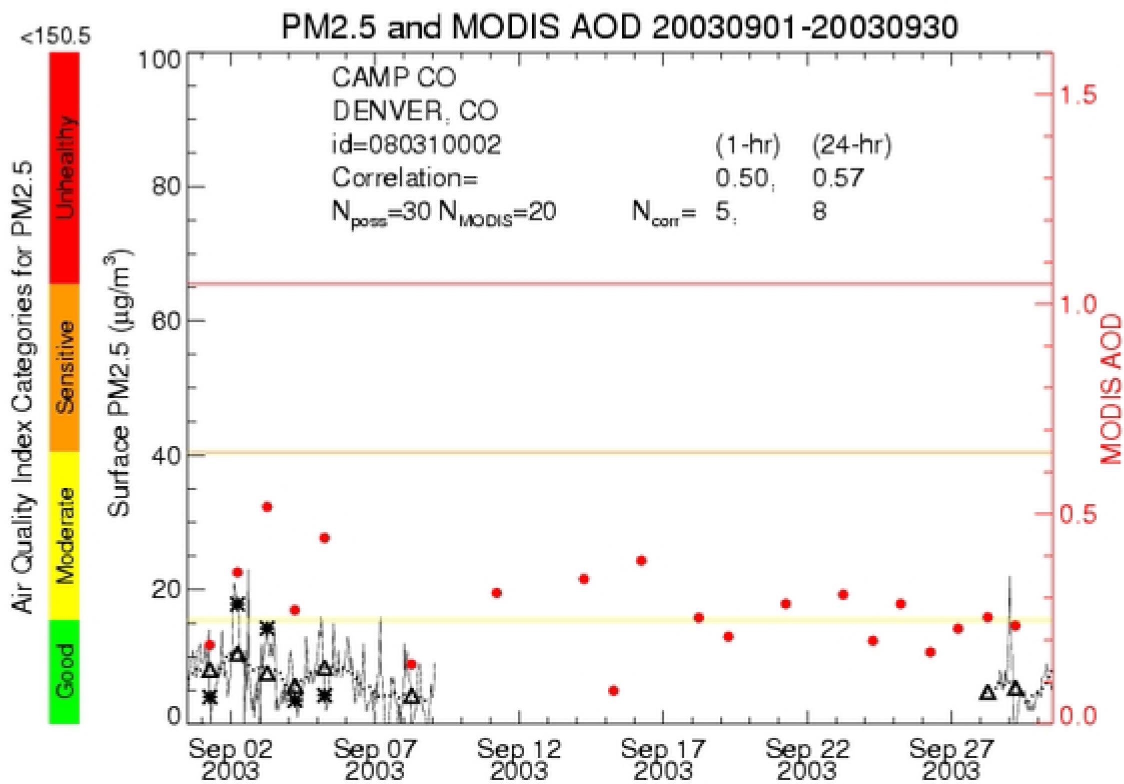


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
BLAIR STREET MO
ST. LOUIS, MO-IL
id=295100085
(1-hr) (24-hr)
Correlation= 0.77, 0.76
Nposs=28 NMODIS=17 Ncorr= 16, 17
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

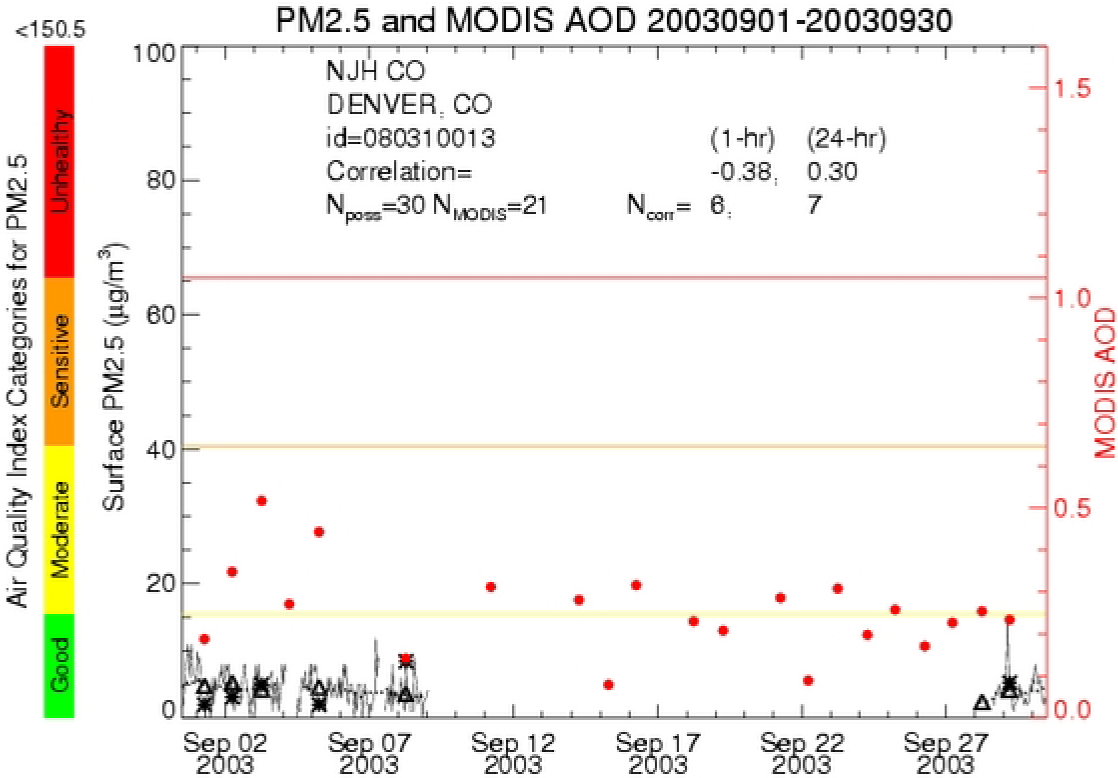
Region 8



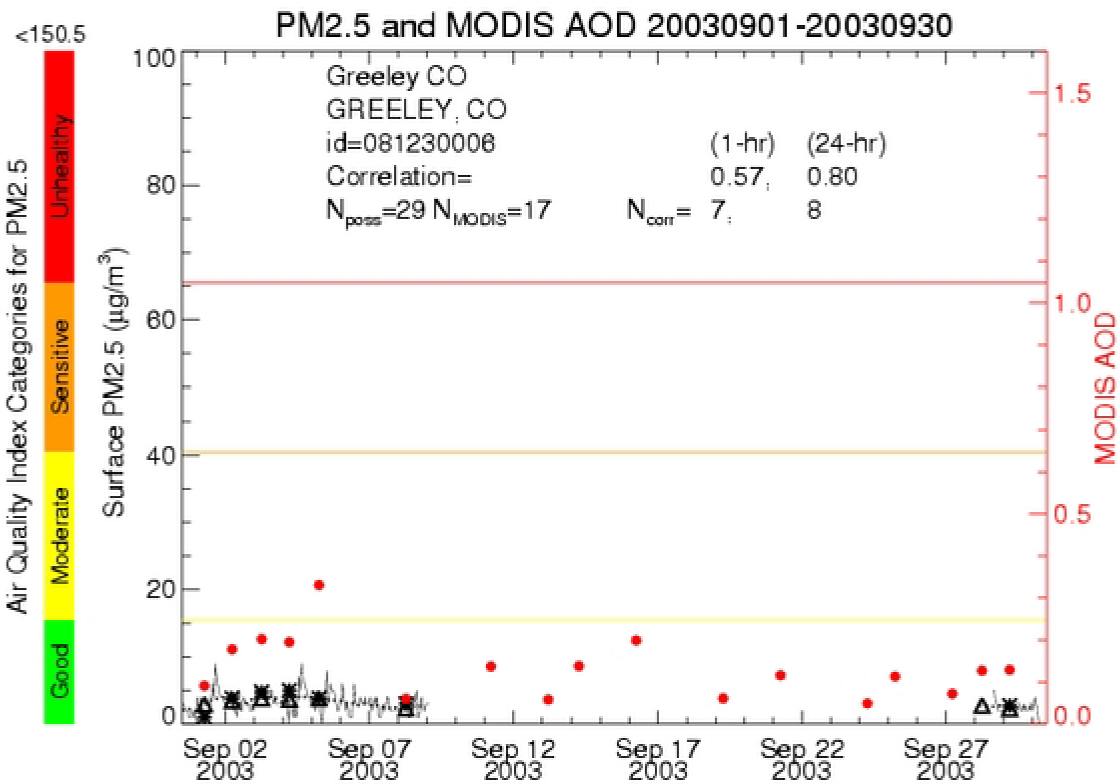
PM2.5 and MODIS AOD 20030901-20030930
Commerce City CO
DENVER, CO
id=080010006
(1-hr) (24-hr)
Correlation= -0.12, 0.31
N_{poss}=30 N_{MODIS}=18 N_{corr}= 7, 8
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



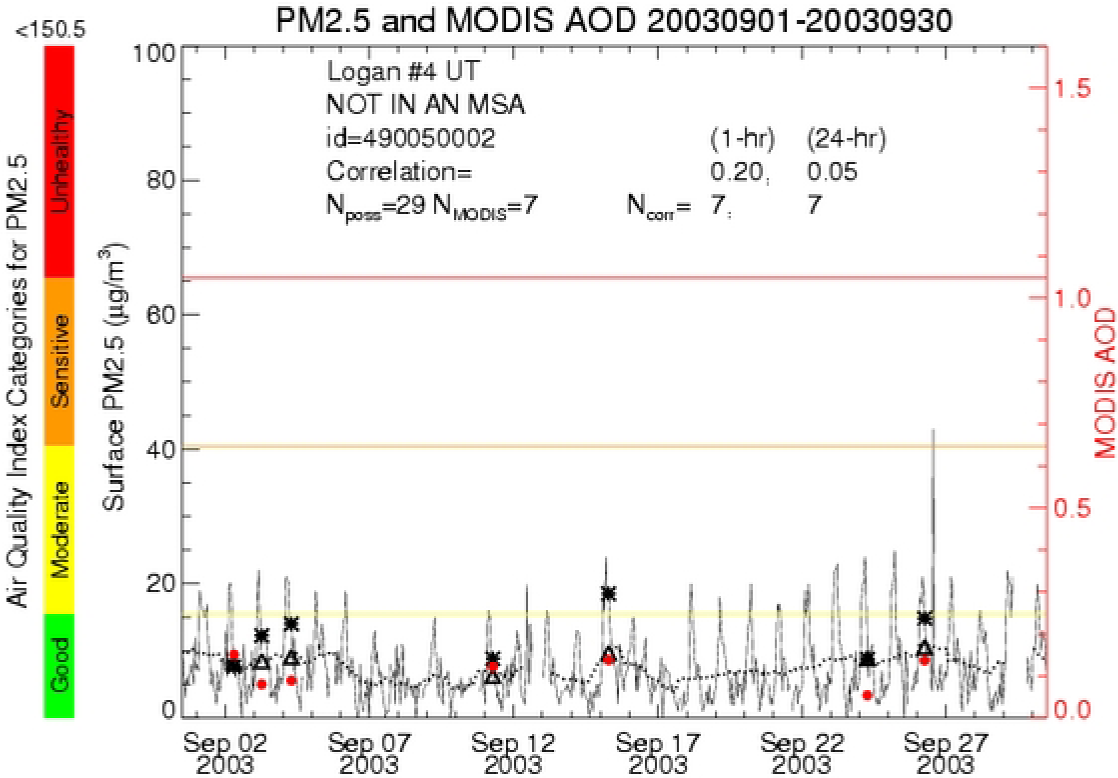
PM2.5 and MODIS AOD 20030901-20030930
CAMP CO
DENVER, CO
id=080310002
(1-hr) (24-hr)
Correlation= 0.50, 0.57
N_{poss}=30 N_{MODIS}=20 N_{corr}= 5, 8
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

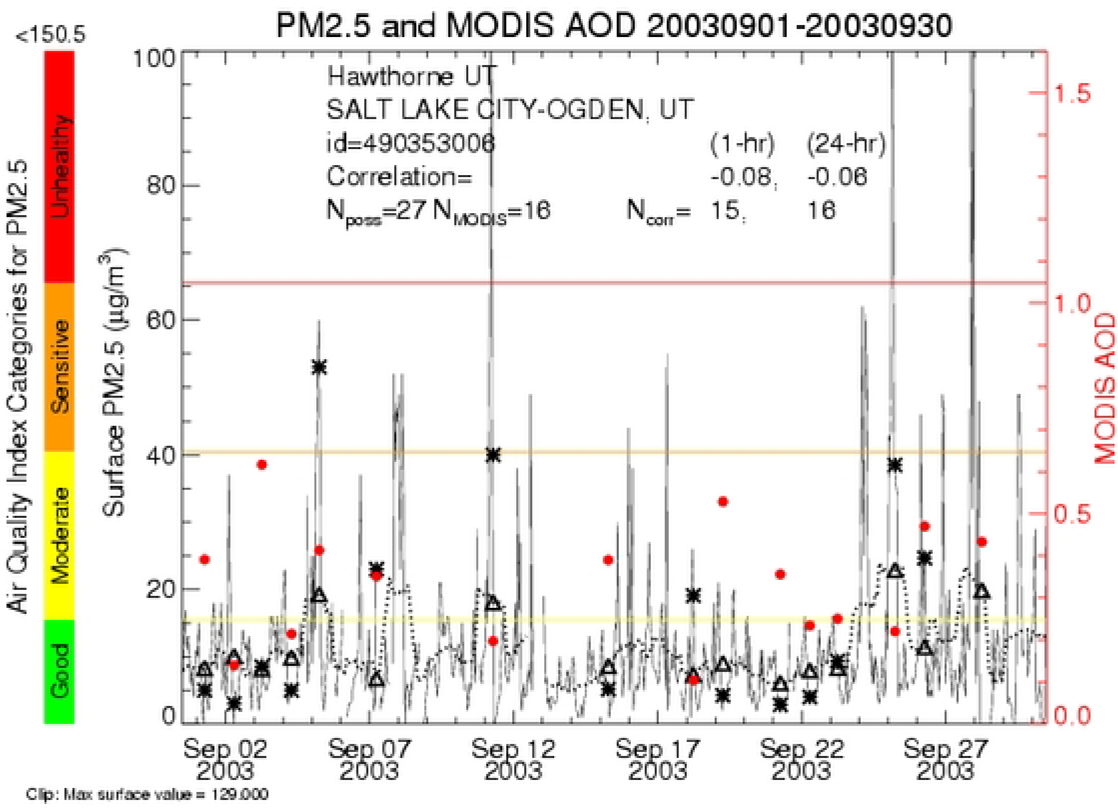


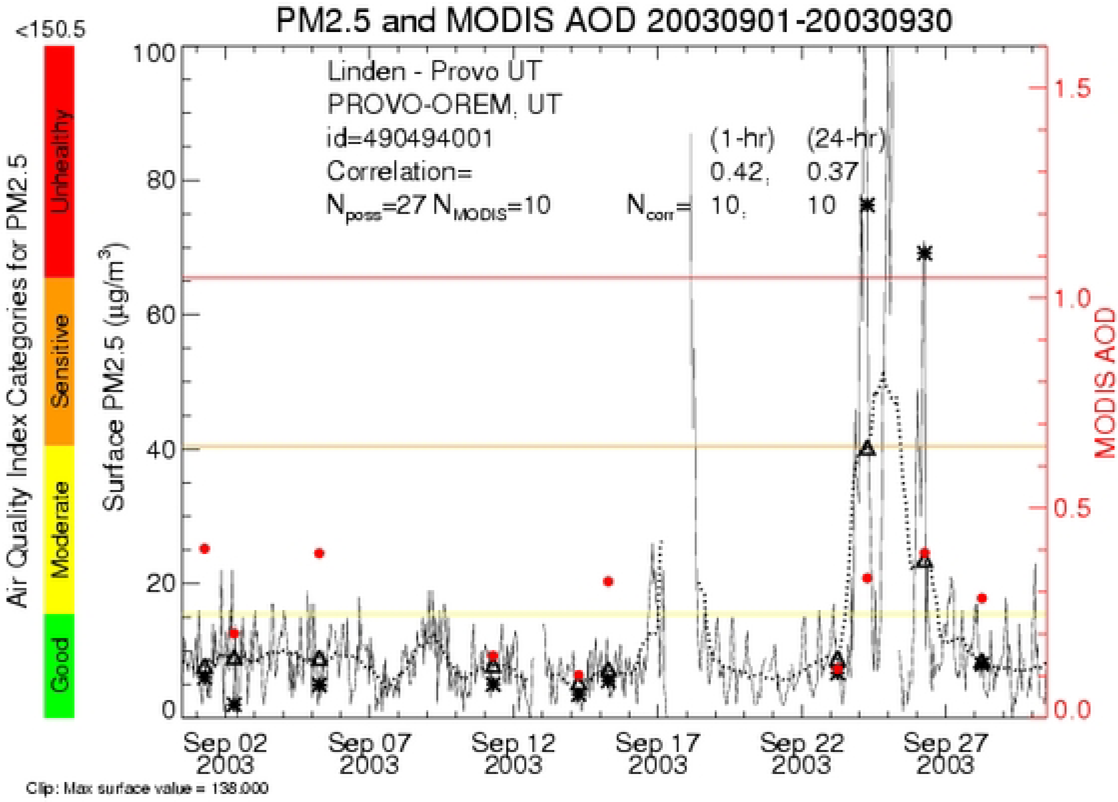
PM2.5 and MODIS AOD 20030901-20030930
NJH CO
DENVER, CO
id=080310013
Correlation=
(1-hr) (24-hr)
-0.38, 0.30
N_{poss}=30 N_{MODIS}=21
N_{corr}= 6, 7
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

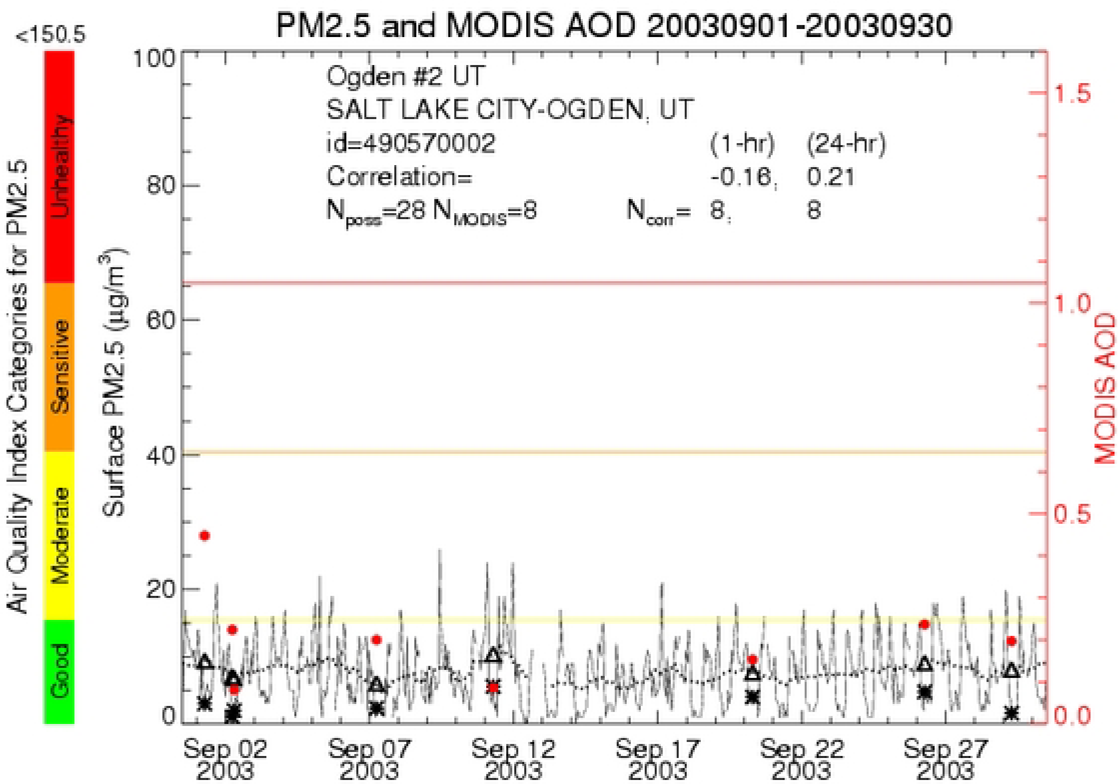


PM2.5 and MODIS AOD 20030901-20030930
Greeley CO
GREELEY, CO
id=081230006
Correlation=
(1-hr) (24-hr)
0.57, 0.80
N_{poss}=29 N_{MODIS}=17
N_{corr}= 7, 8
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

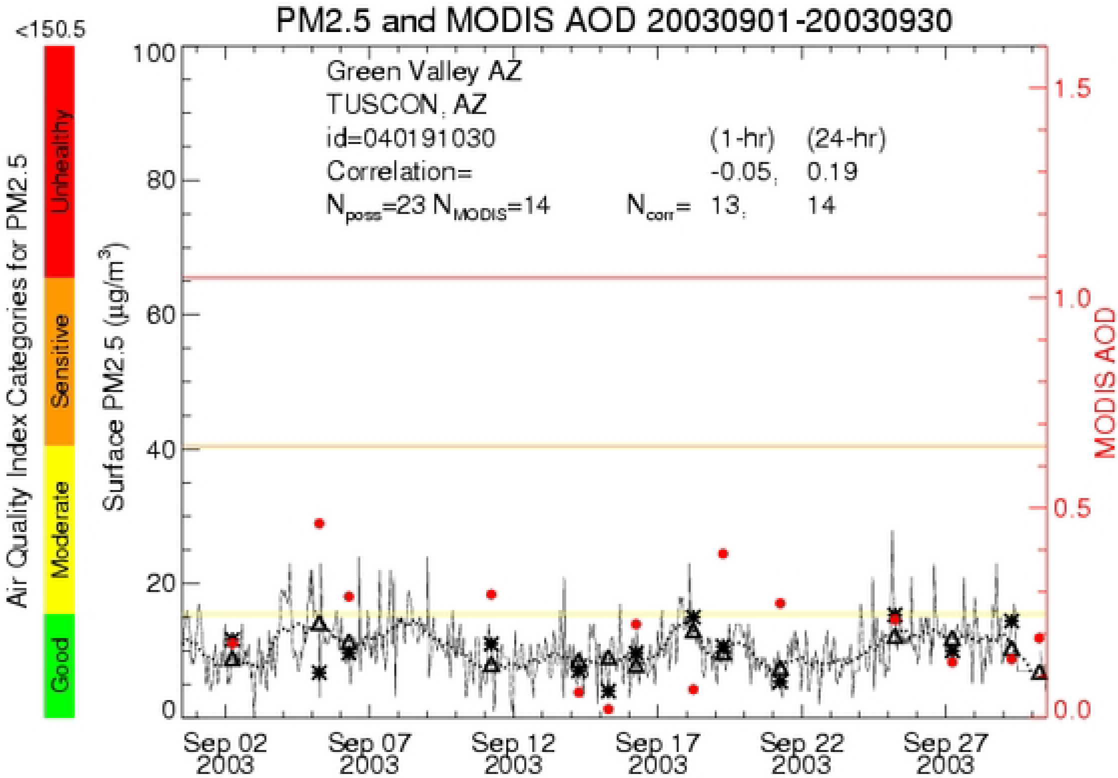

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Logan #4 UT
NOT IN AN MSA
id=490050002
Correlation=
N_poss=29 N_MODIS=7
(1-hr) (24-hr)
0.20; 0.05
N_corr= 7; 7
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

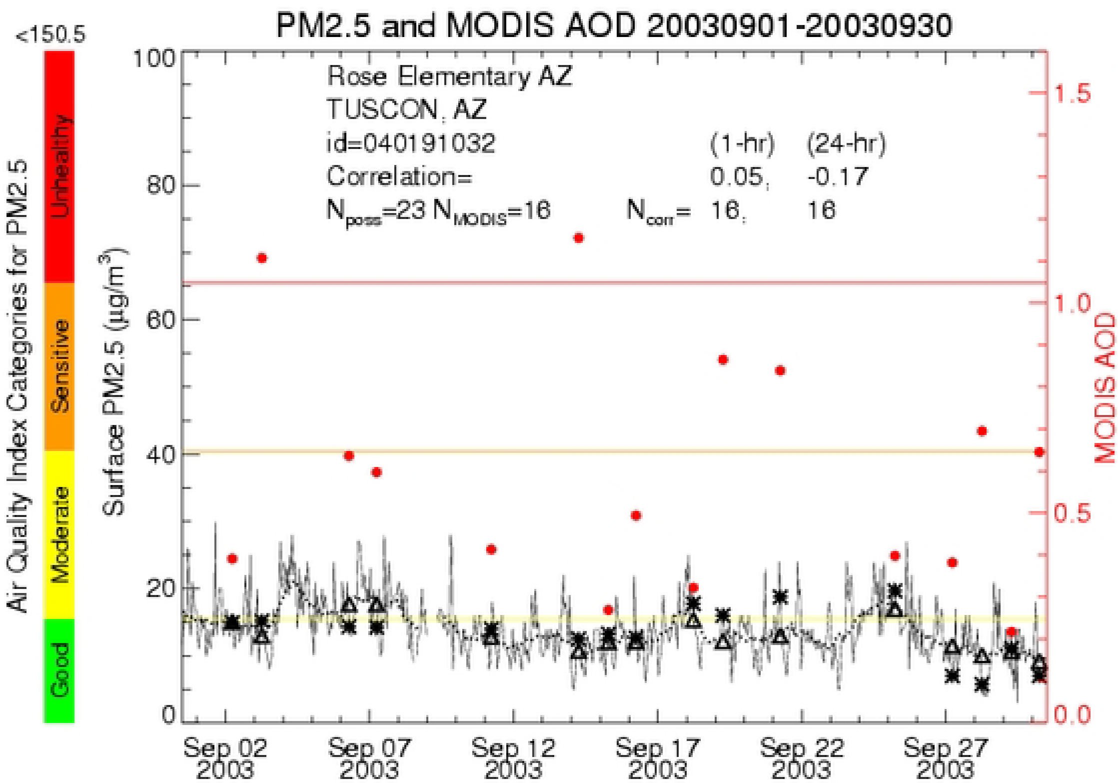

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Hawthorne UT
SALT LAKE CITY-OGDEN, UT
id=490353006
Correlation=
N_poss=27 N_MODIS=16
(1-hr) (24-hr)
-0.08; -0.06
N_corr= 15; 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 129.000

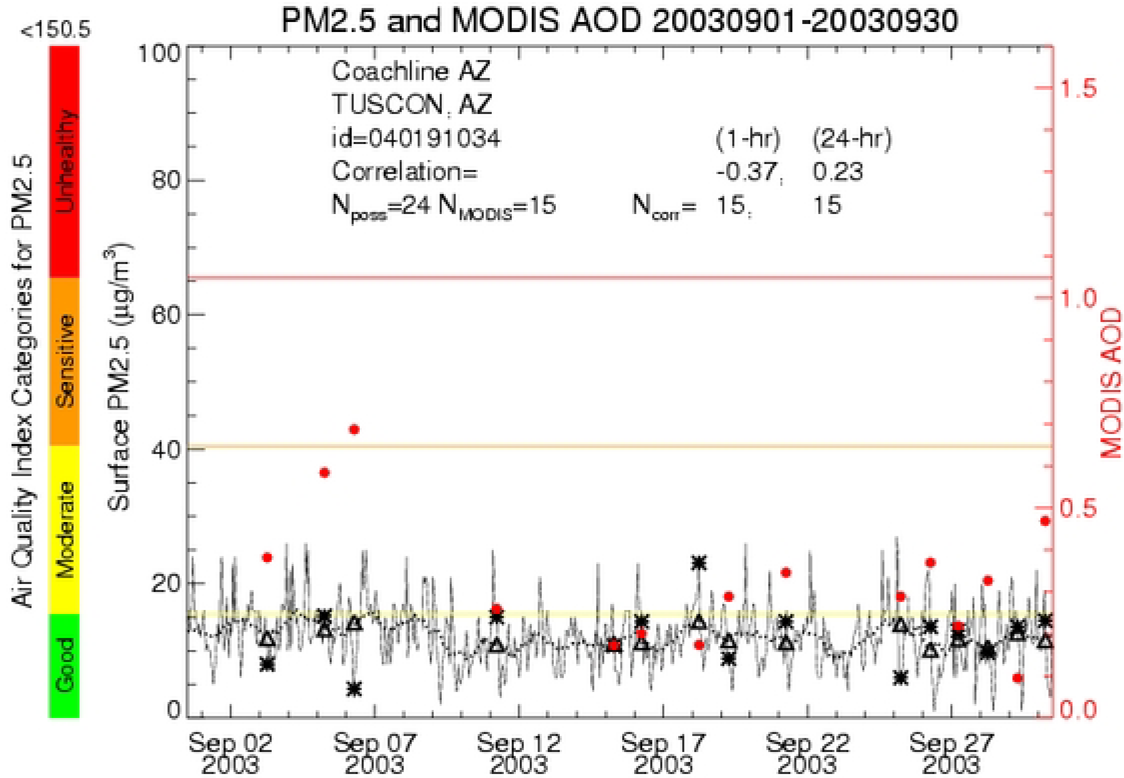

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Linden - Provo UT
PROVO-OREM, UT
id=490494001
Correlation=
Nposs=27 NMODIS=10
(1-hr) (24-hr)
0.42, 0.37
Ncorr= 10, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 138.000


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Ogden #2 UT
SALT LAKE CITY-OGDEN, UT
id=490570002
Correlation=
Nposs=28 NMODIS=8
(1-hr) (24-hr)
-0.16, 0.21
Ncorr= 8, 8
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

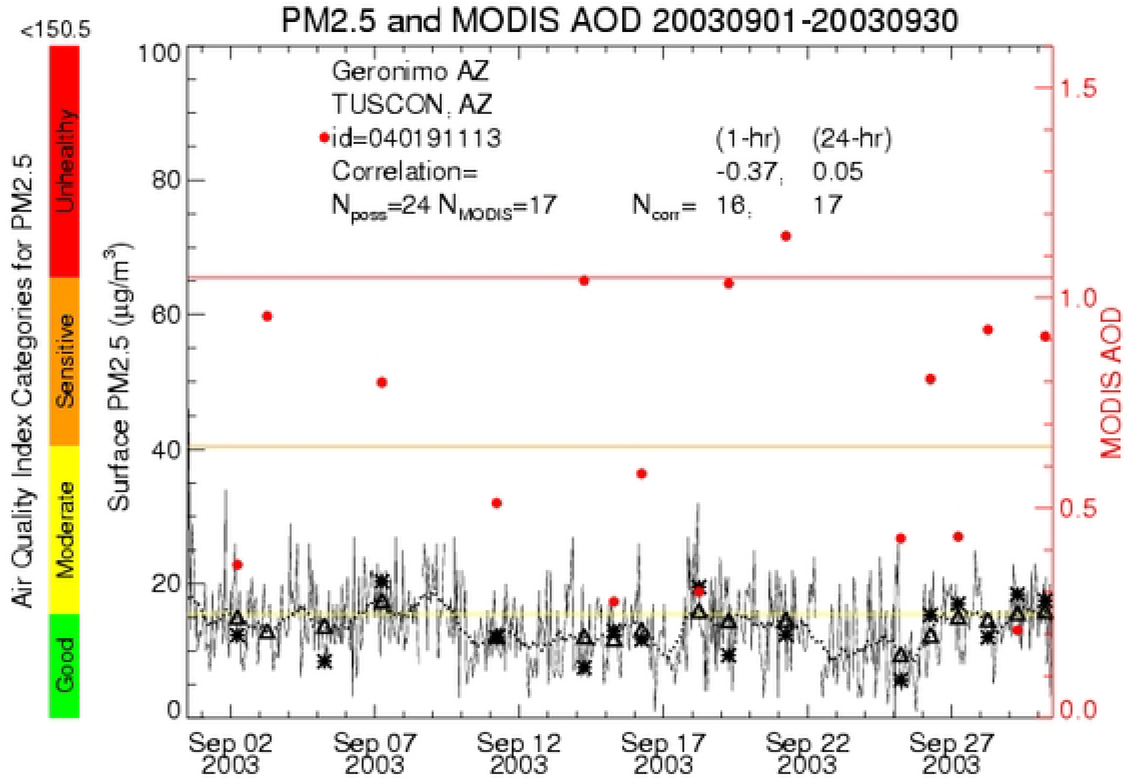
Region 9


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Green Valley AZ
TUSCON, AZ
id=040191030 (1-hr) (24-hr)
Correlation= -0.05, 0.19
Nposs=23 NMODIS=14 Ncorr= 13, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

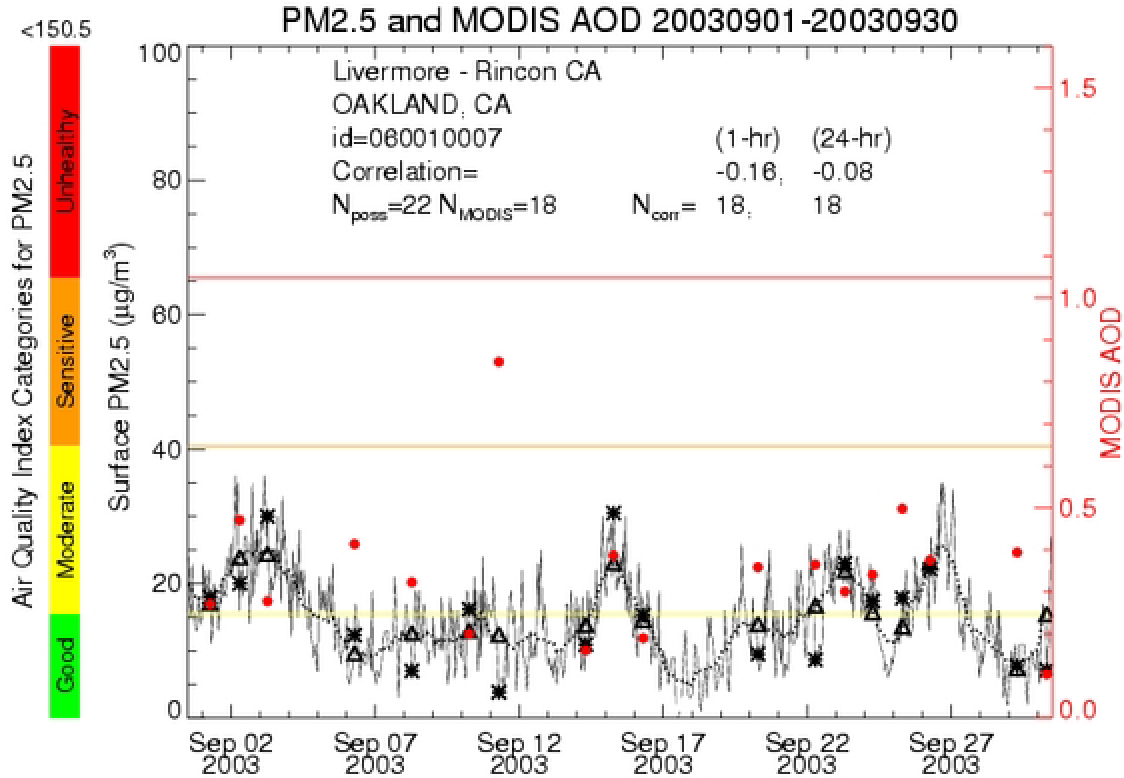

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Rose Elementary AZ
TUSCON, AZ
id=040191032 (1-hr) (24-hr)
Correlation= 0.05, -0.17
Nposs=23 NMODIS=16 Ncorr= 16, 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

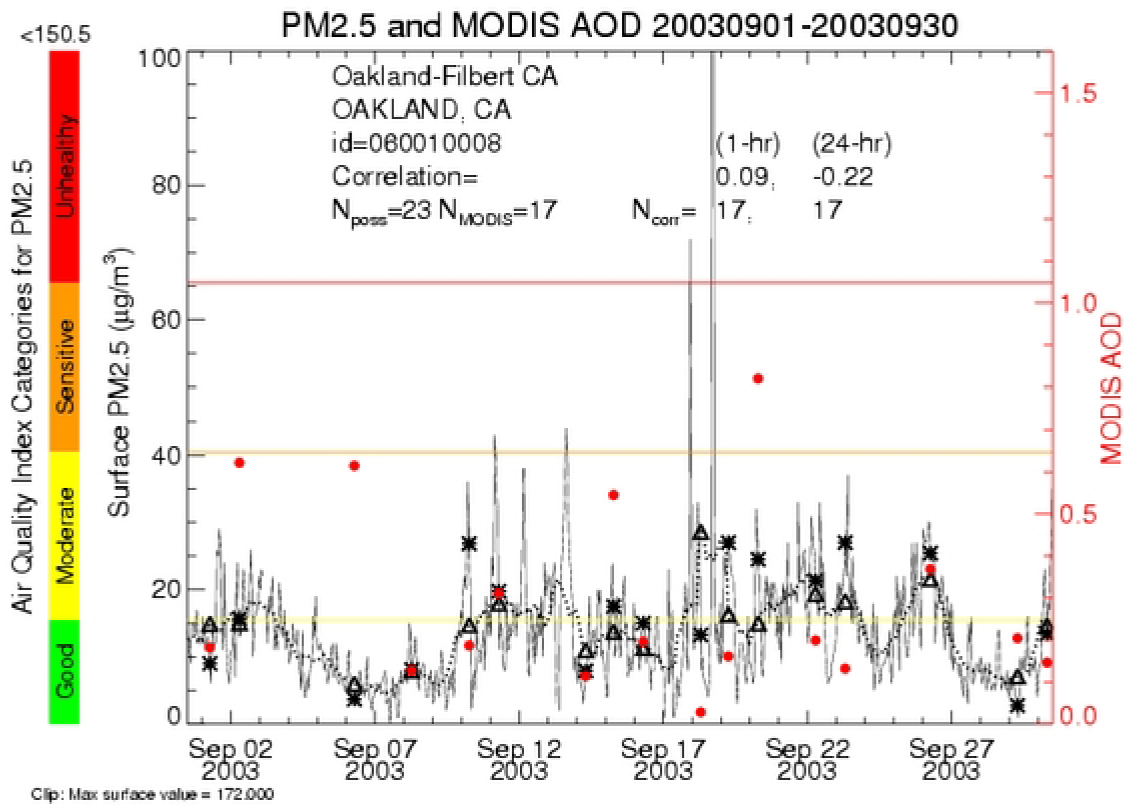


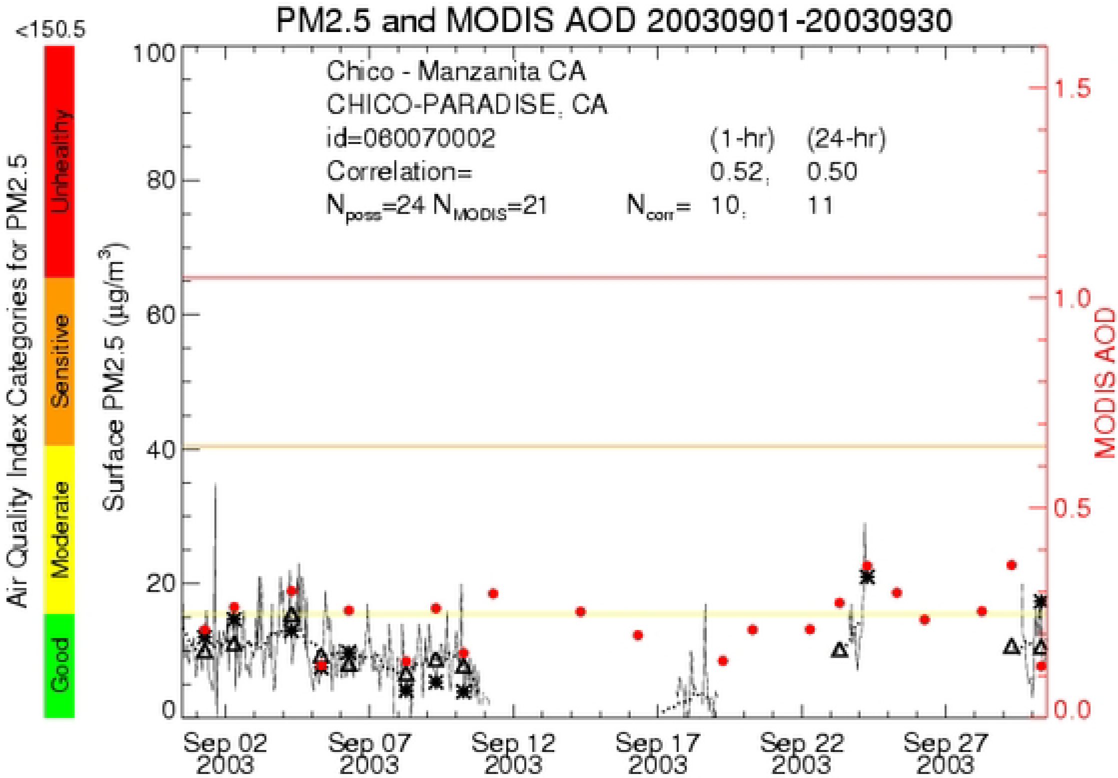
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Coachline AZ
TUSCON, AZ
id=040191034
(1-hr) (24-hr)
Correlation= -0.37, 0.23
Nposs=24 NMODIS=15 Ncorr= 15, 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

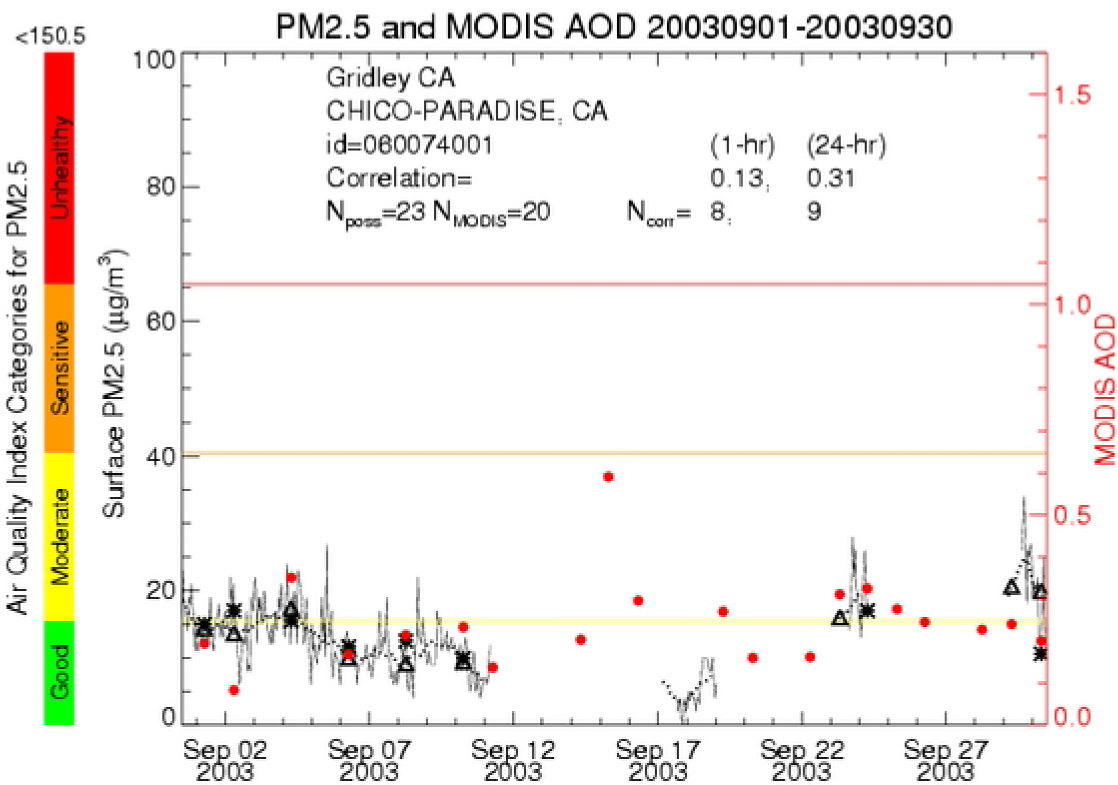


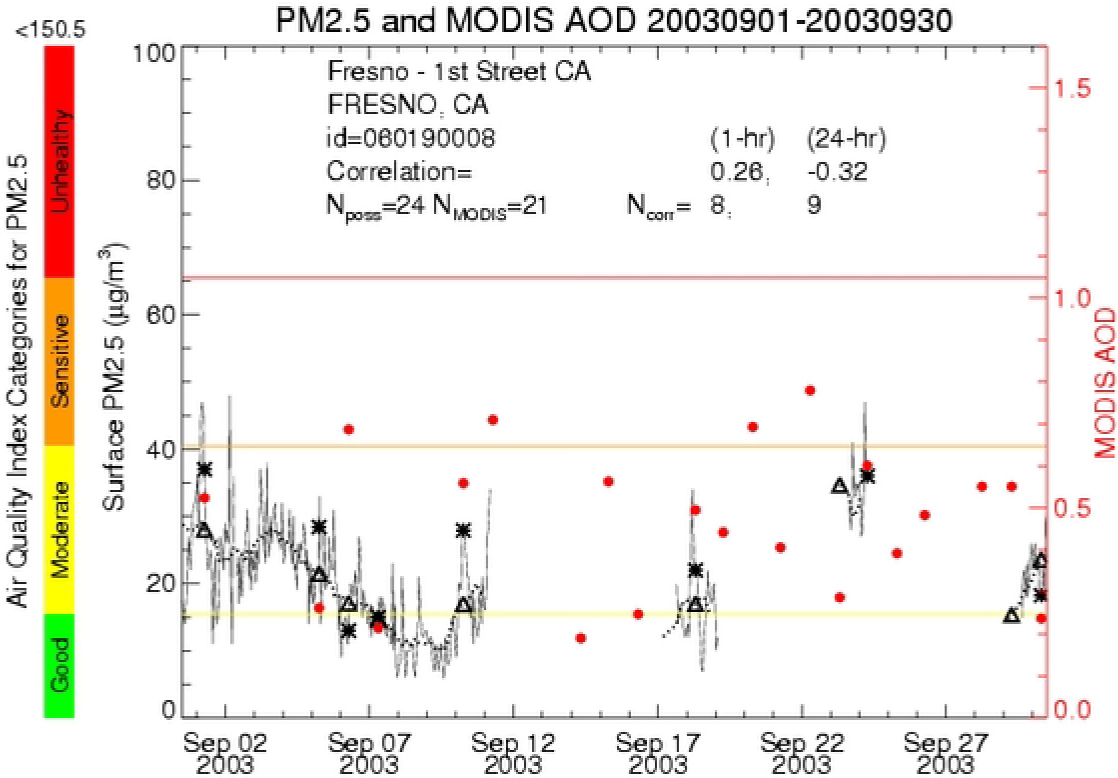
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Geronimo AZ
TUSCON, AZ
id=040191113
(1-hr) (24-hr)
Correlation= -0.37, 0.05
Nposs=24 NMODIS=17 Ncorr= 16, 17
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Livermore - Rincon CA
OAKLAND, CA
id=060010007
(1-hr) (24-hr)
Correlation= -0.16, -0.08
Nposs=22 NMODIS=18 Ncorr= 18, 18
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

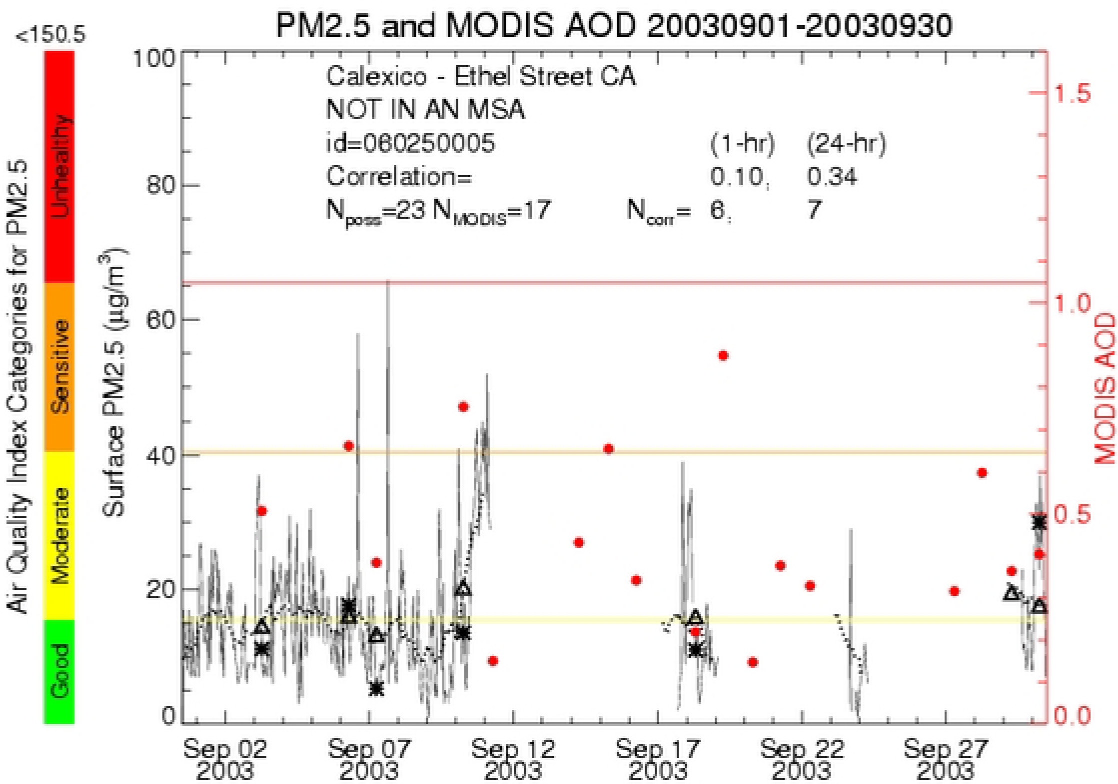

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Oakland-Filbert CA
OAKLAND, CA
id=060010008
(1-hr) (24-hr)
Correlation= 0.09, -0.22
Nposs=23 NMODIS=17 Ncorr= 17, 17
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 172.000


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Chico - Manzanita CA
CHICO-PARADISE, CA
id=060070002 (1-hr) (24-hr)
Correlation= 0.52, 0.50
N_{poss}=24 N_{MODIS}=21 N_{corr}= 10, 11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

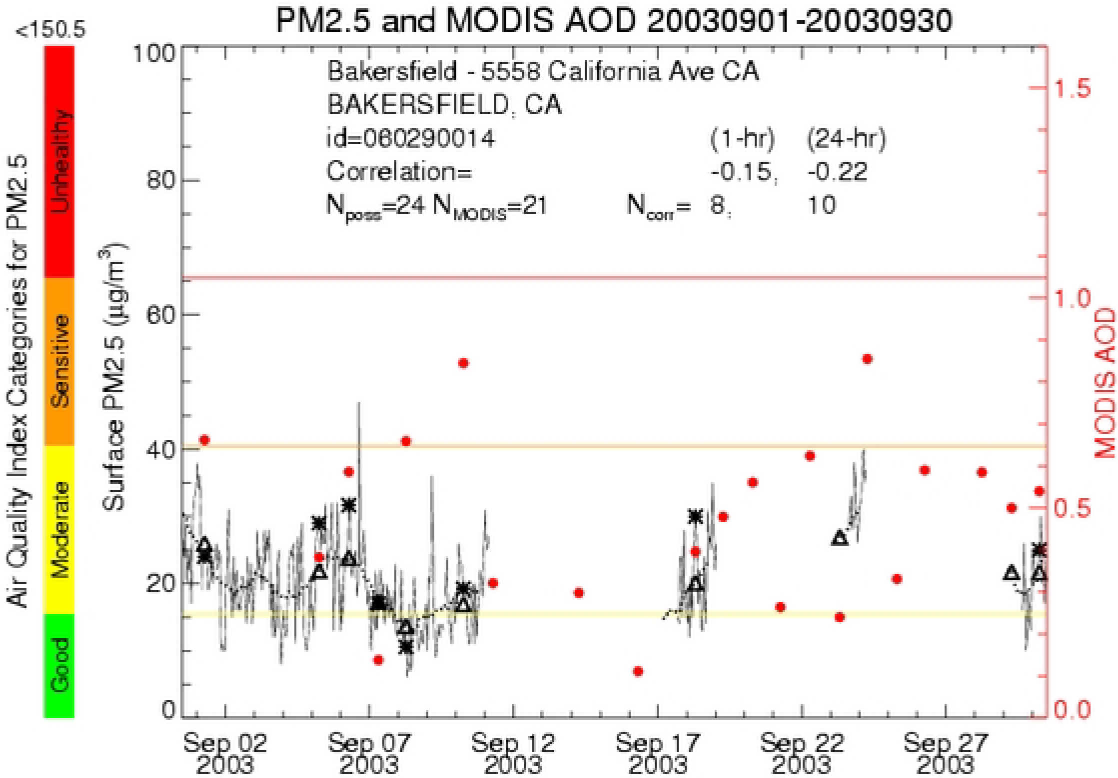

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Gridley CA
CHICO-PARADISE, CA
id=060074001 (1-hr) (24-hr)
Correlation= 0.13, 0.31
N_{poss}=23 N_{MODIS}=20 N_{corr}= 8, 9
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

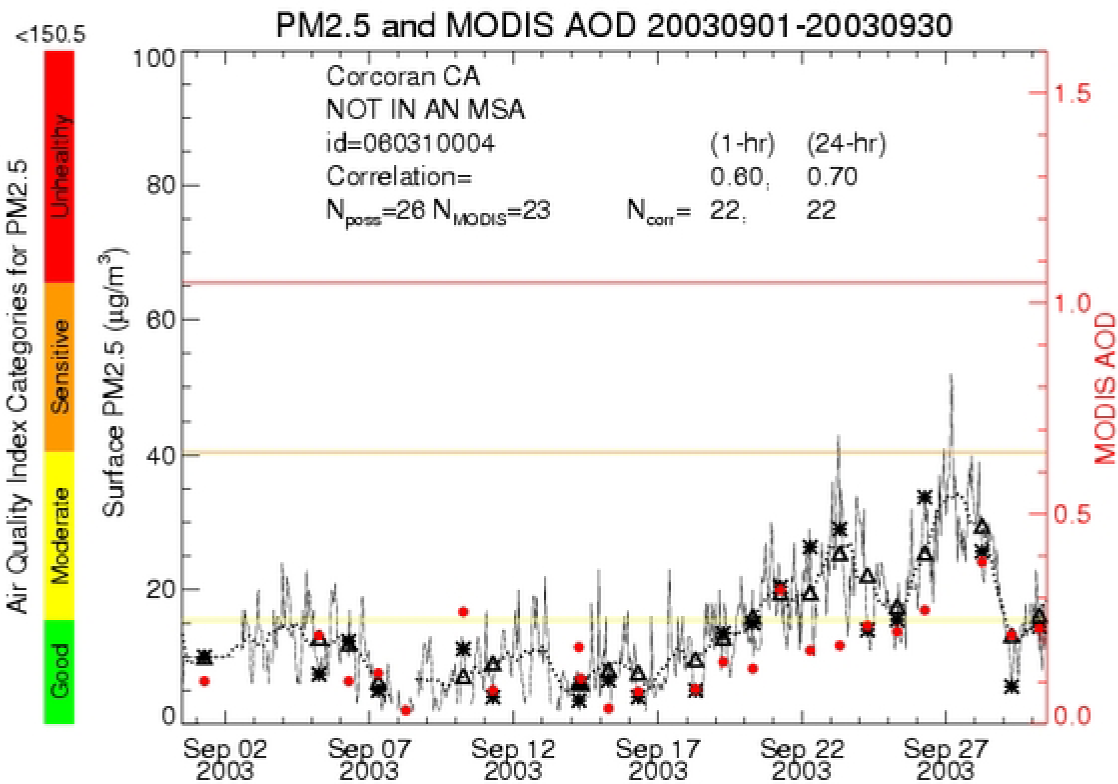


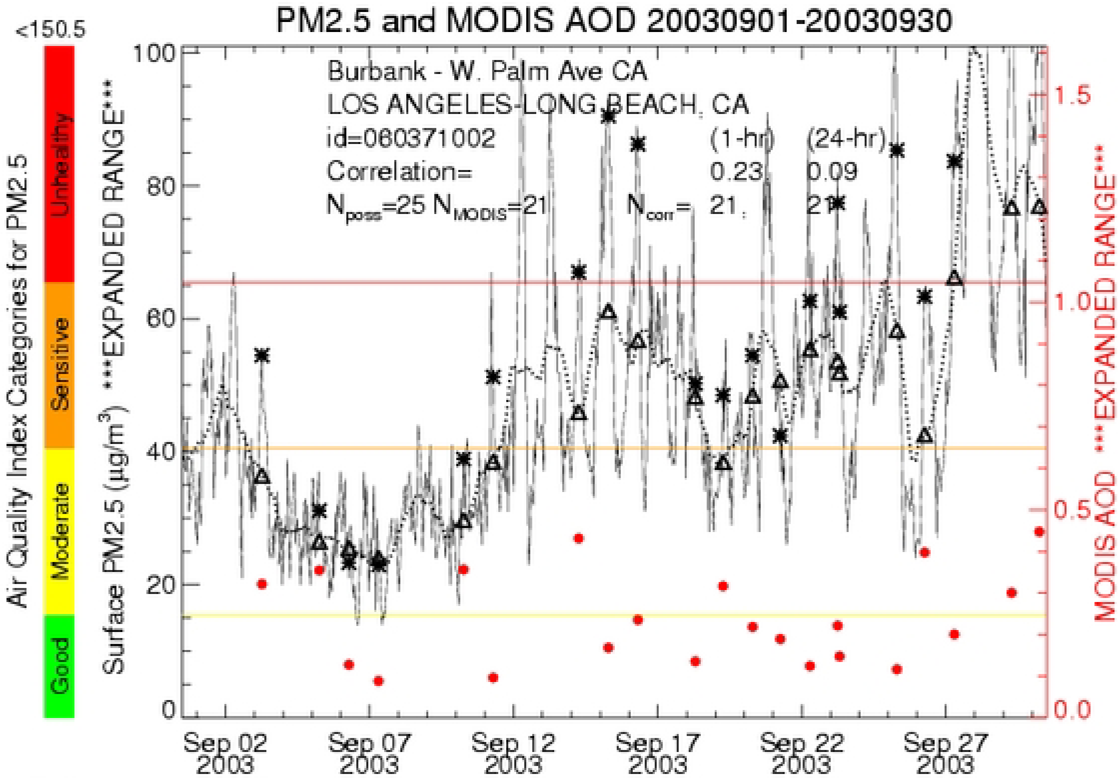
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Fresno - 1st Street CA
FRESNO, CA
id=060190008 (1-hr) (24-hr)
Correlation= 0.26, -0.32
N_{poss}=24 N_{MODIS}=21 N_{corr}= 8, 9
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



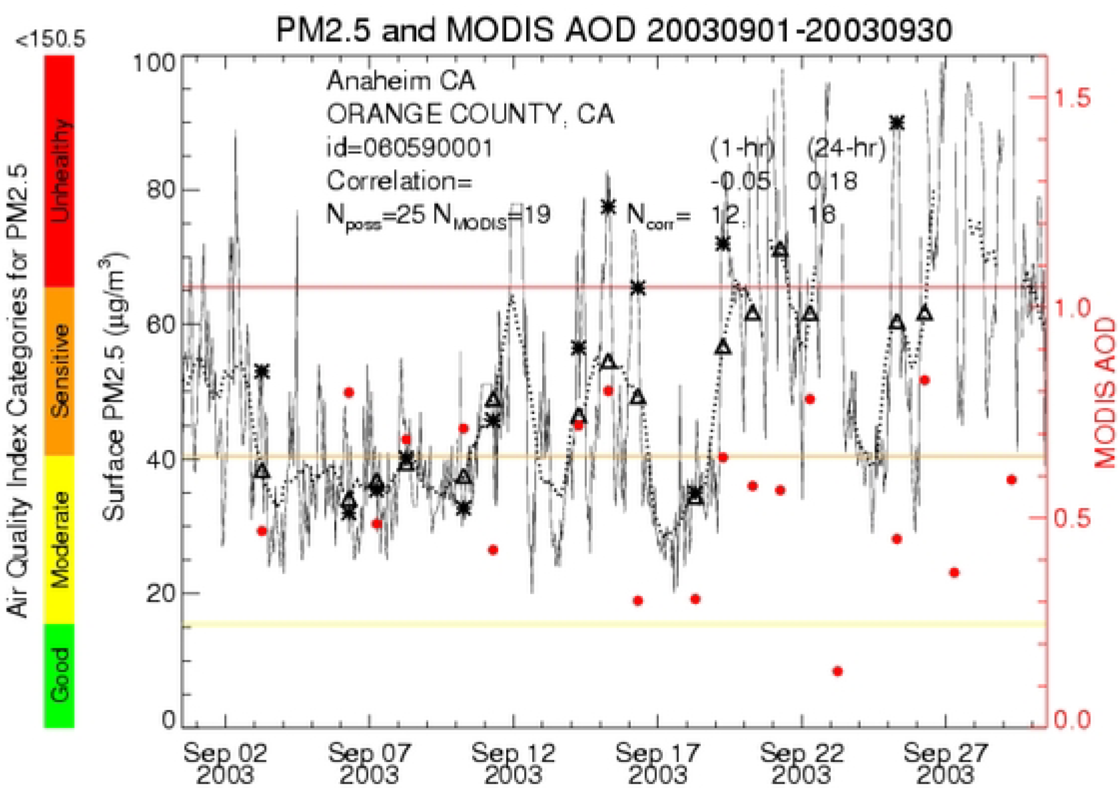
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Calexico - Ethel Street CA
NOT IN AN MSA
id=060250005 (1-hr) (24-hr)
Correlation= 0.10, 0.34
N_{poss}=23 N_{MODIS}=17 N_{corr}= 6, 7
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

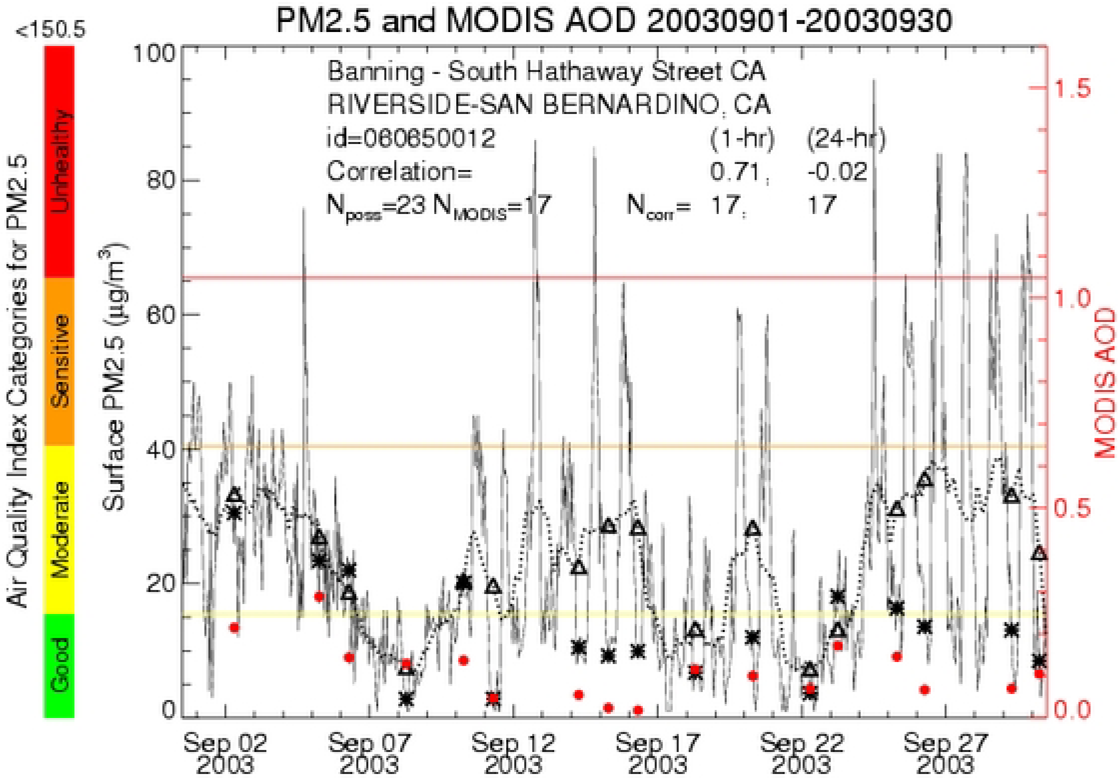

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Bakersfield - 5558 California Ave CA
BAKERSFIELD, CA
id=060290014 (1-hr) (24-hr)
Correlation= -0.15, -0.22
Nposs=24 NMODIS=21 Ncorr= 8, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

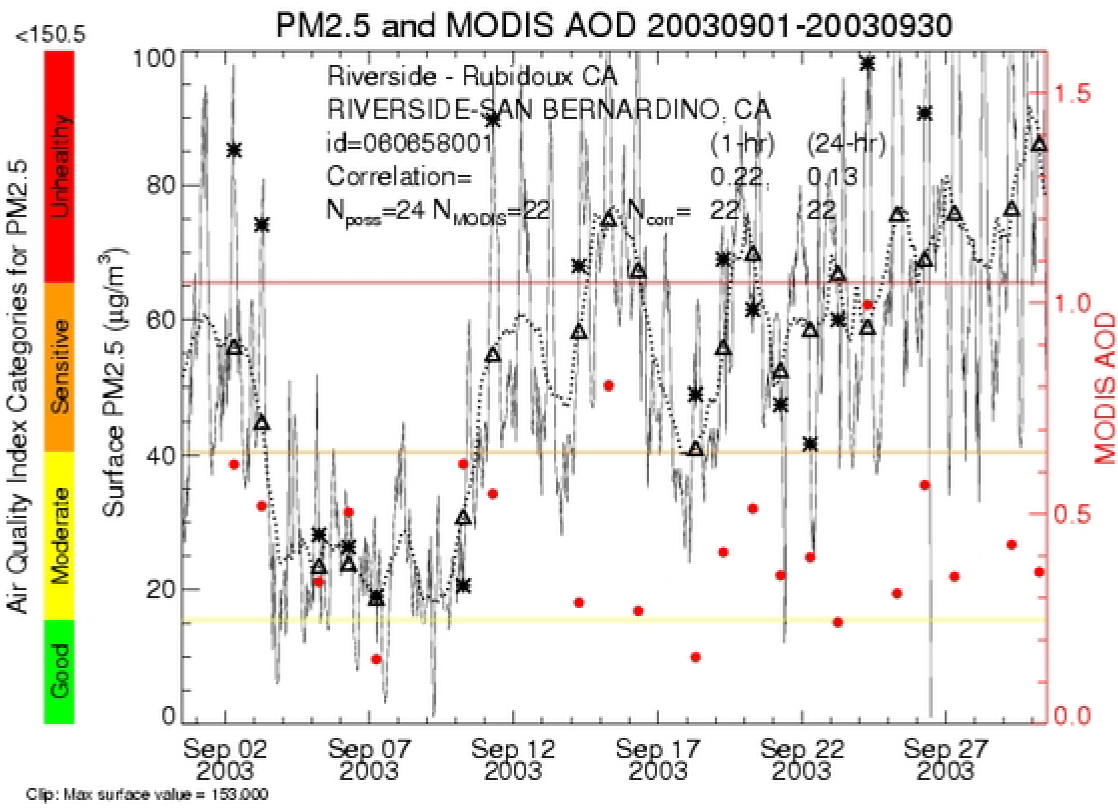

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Corcoran CA
NOT IN AN MSA
id=060310004 (1-hr) (24-hr)
Correlation= 0.60, 0.70
Nposs=26 NMODIS=23 Ncorr= 22, 22
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

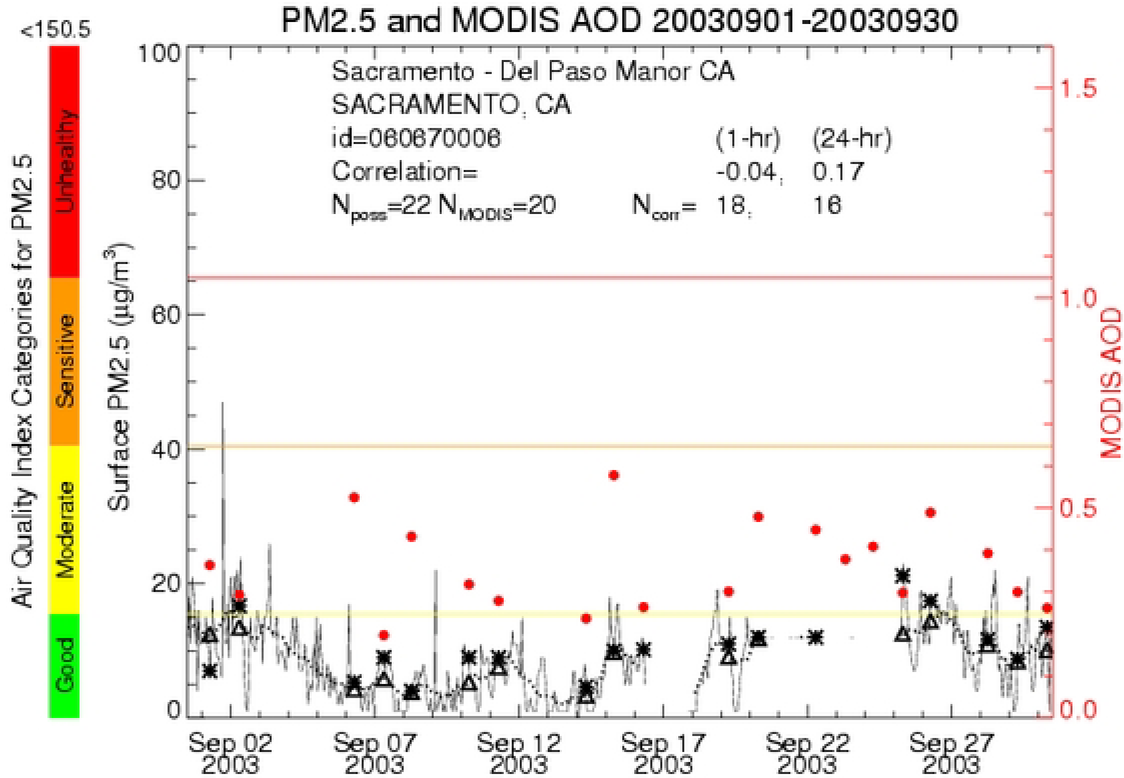


Clip: Max surface value = 137.000

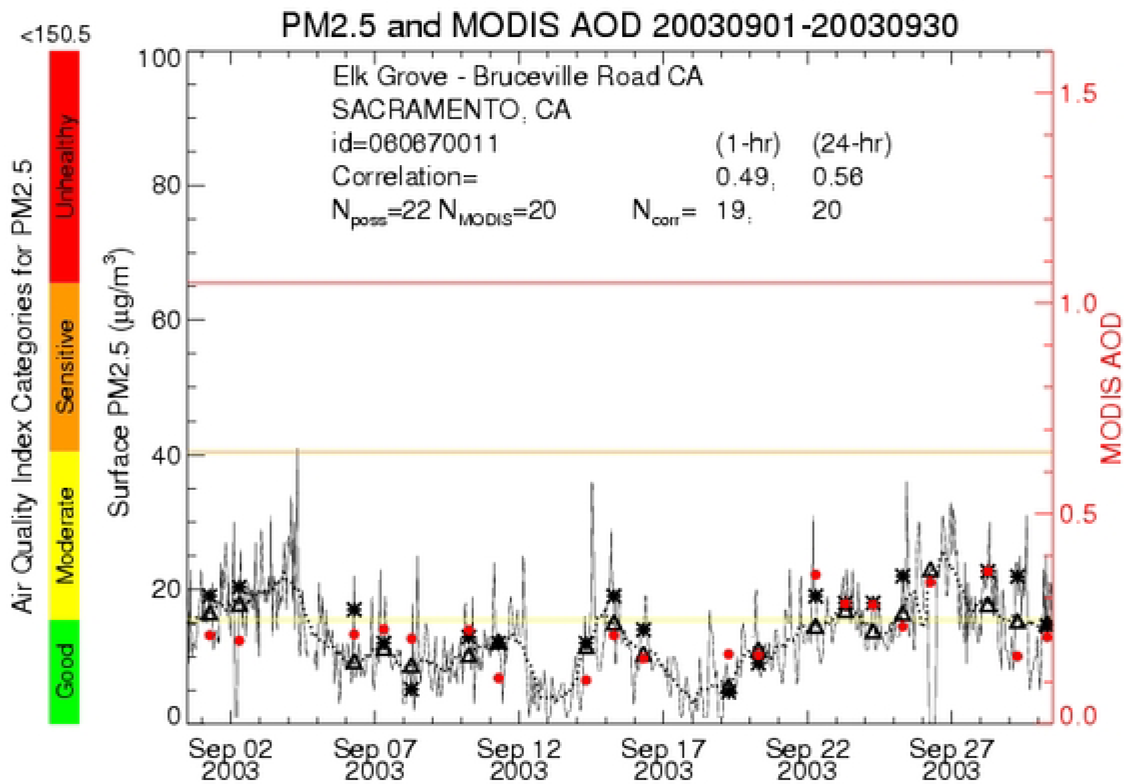



PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Banning - South Hathaway Street CA
RIVERSIDE-SAN BERNARDINO, CA
id=060650012 (1-hr) (24-hr)
Correlation= 0.71, -0.02
Nposs=23 NMODIS=17 Ncorr= 17, 17
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

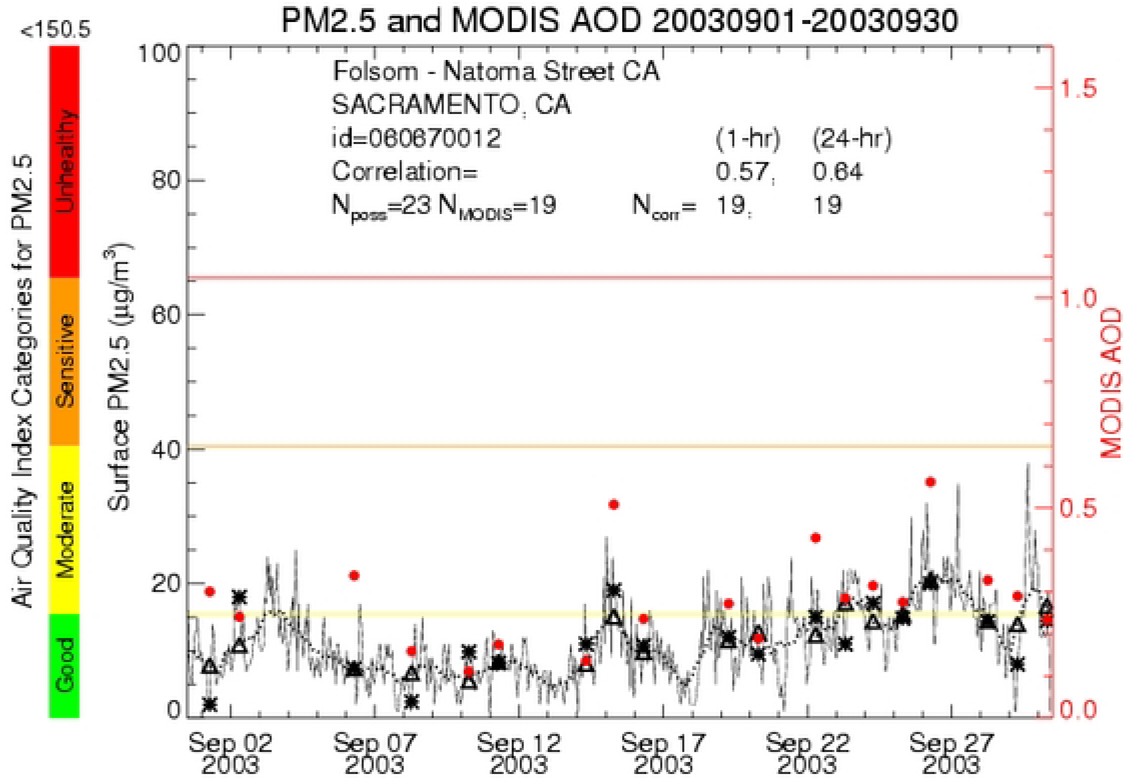

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Riverside - Rubidoux CA
RIVERSIDE-SAN BERNARDINO, CA
id=060658001 (1-hr) (24-hr)
Correlation= 0.22, 0.13
Nposs=24 NMODIS=22 Ncorr= 22 22
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 153.000

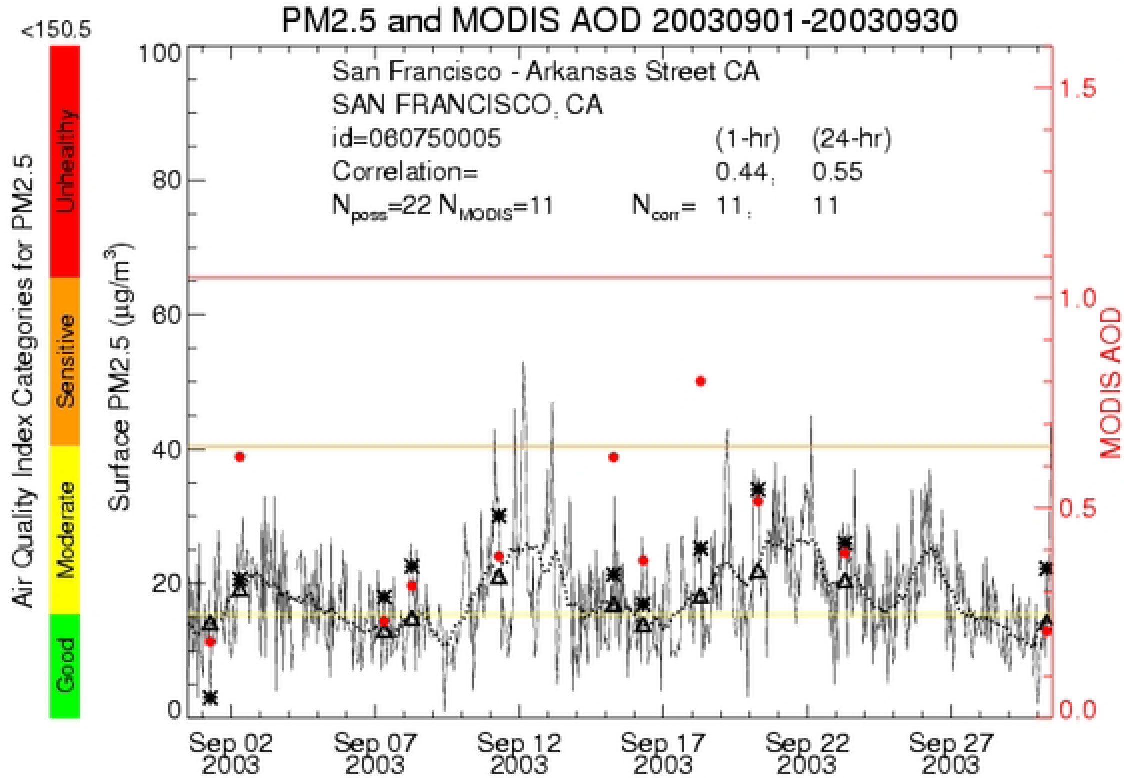


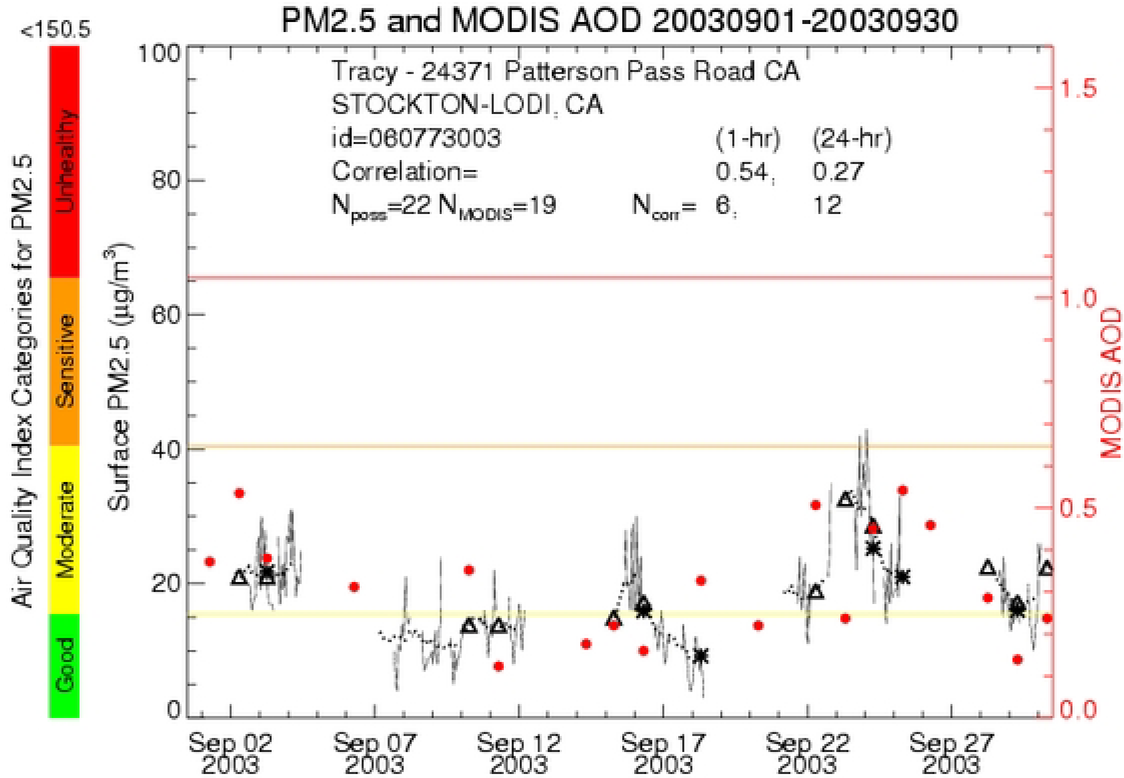
PM2.5 and MODIS AOD 20030901-20030930
Sacramento - Del Paso Manor CA
SACRAMENTO, CA
id=060670006 (1-hr) (24-hr)
Correlation= -0.04, 0.17
N_{poss}=22 N_{MODIS}=20 N_{corr}= 18, 16
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

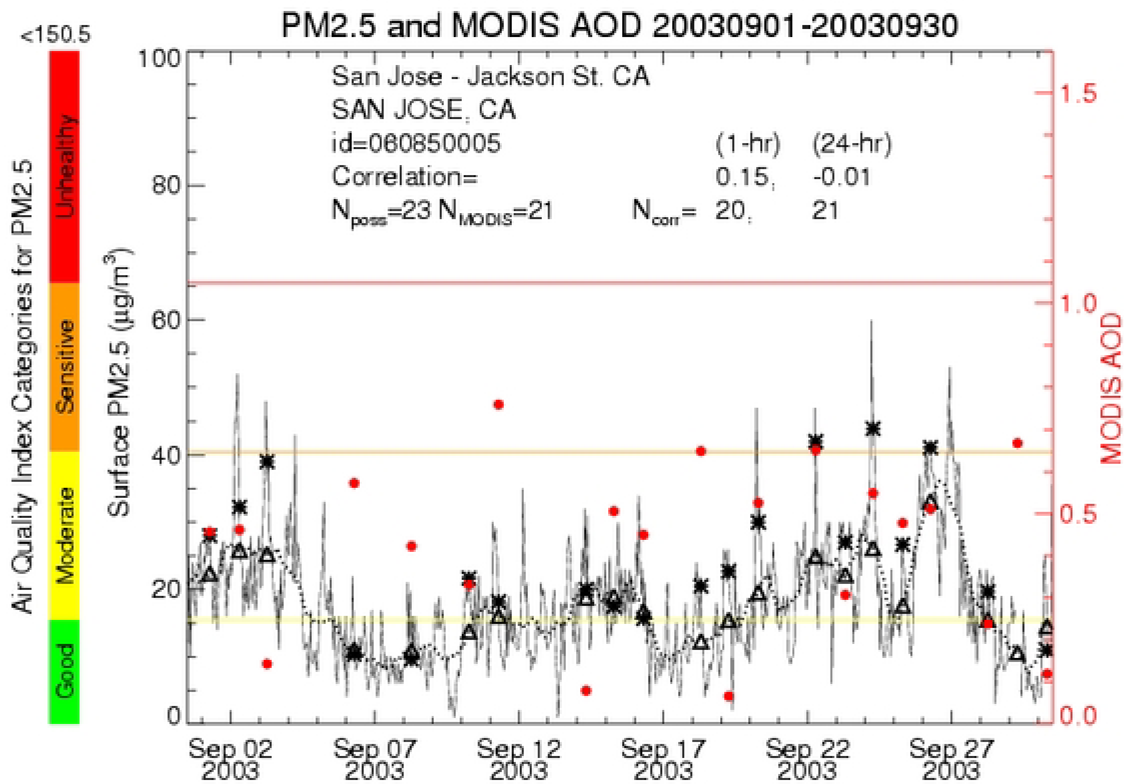


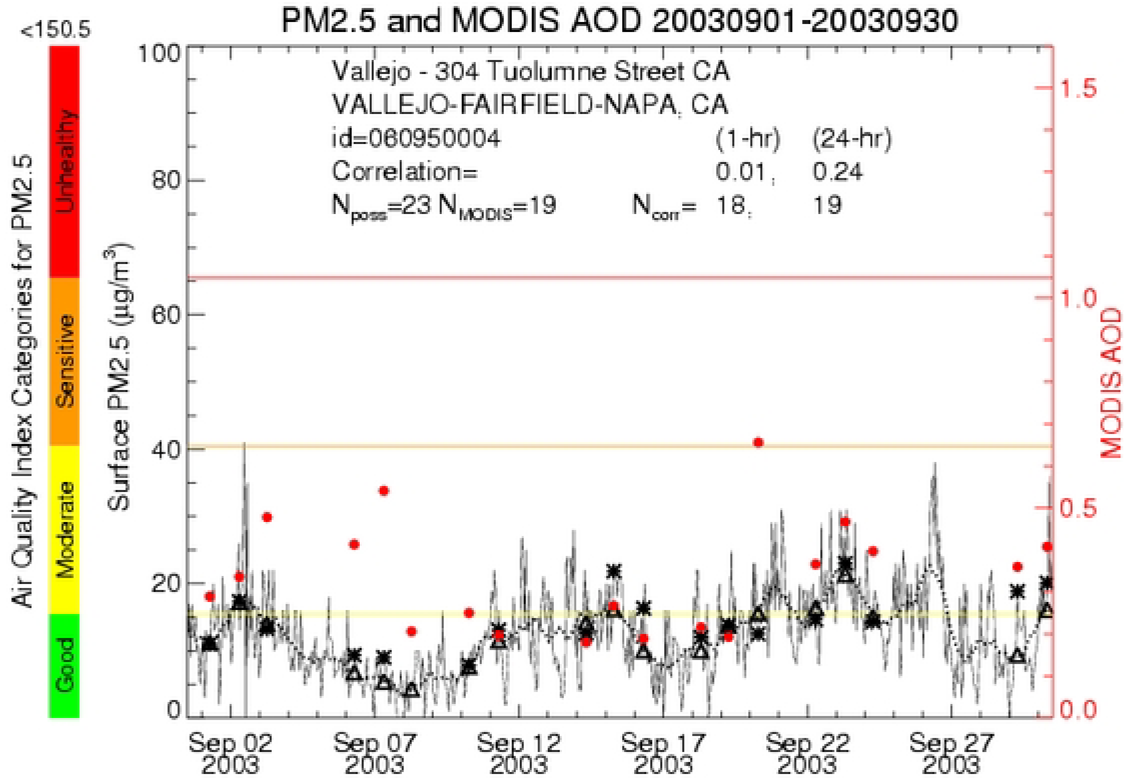
PM2.5 and MODIS AOD 20030901-20030930
Elk Grove - Bruceville Road CA
SACRAMENTO, CA
id=060670011 (1-hr) (24-hr)
Correlation= 0.49, 0.56
N_{poss}=22 N_{MODIS}=20 N_{corr}= 19, 20
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Folsom - Natoma Street CA
SACRAMENTO, CA
id=060670012
(1-hr)
(24-hr)
Correlation=
0.57,
0.64
N_poss=23 N_MODIS=19
N_corr=
19,
19
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

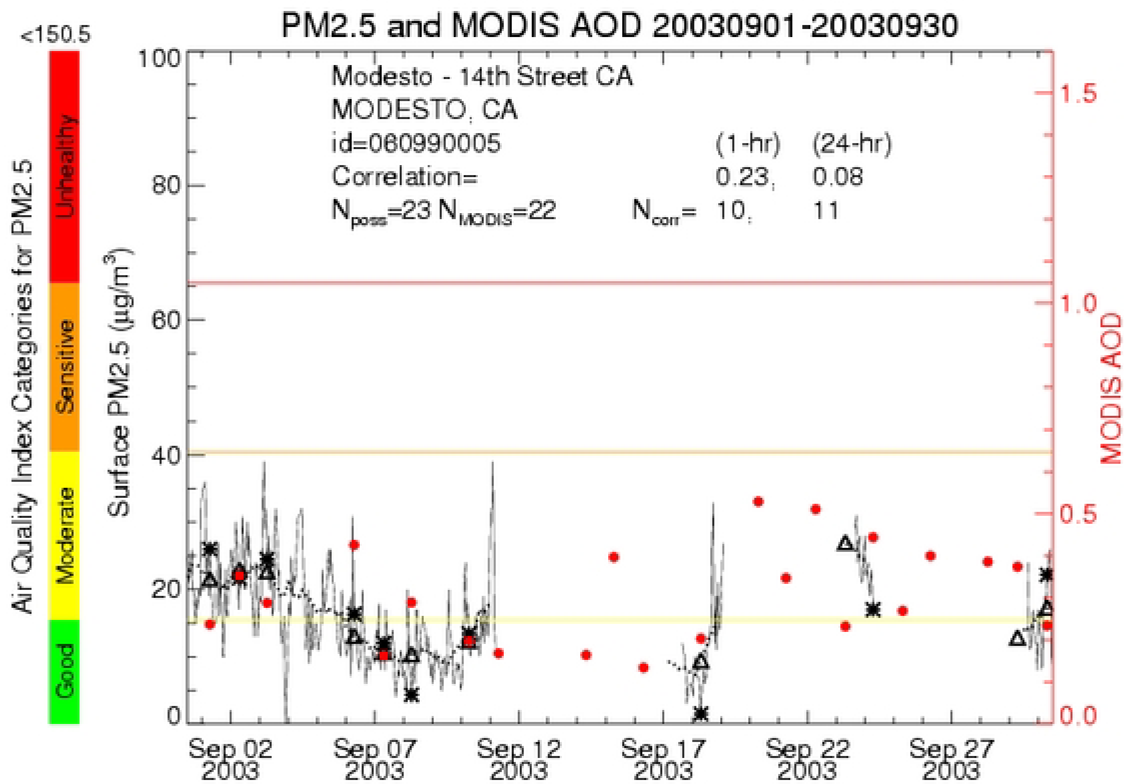

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
San Francisco - Arkansas Street CA
SAN FRANCISCO, CA
id=060750005
(1-hr)
(24-hr)
Correlation=
0.44,
0.55
N_poss=22 N_MODIS=11
N_corr=
11,
11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Tracy - 24371 Patterson Pass Road CA
STOCKTON-LODI, CA
id=060773003 (1-hr) (24-hr)
Correlation= 0.54, 0.27
N_poss=22 N_MODIS=19 N_corr= 6, 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

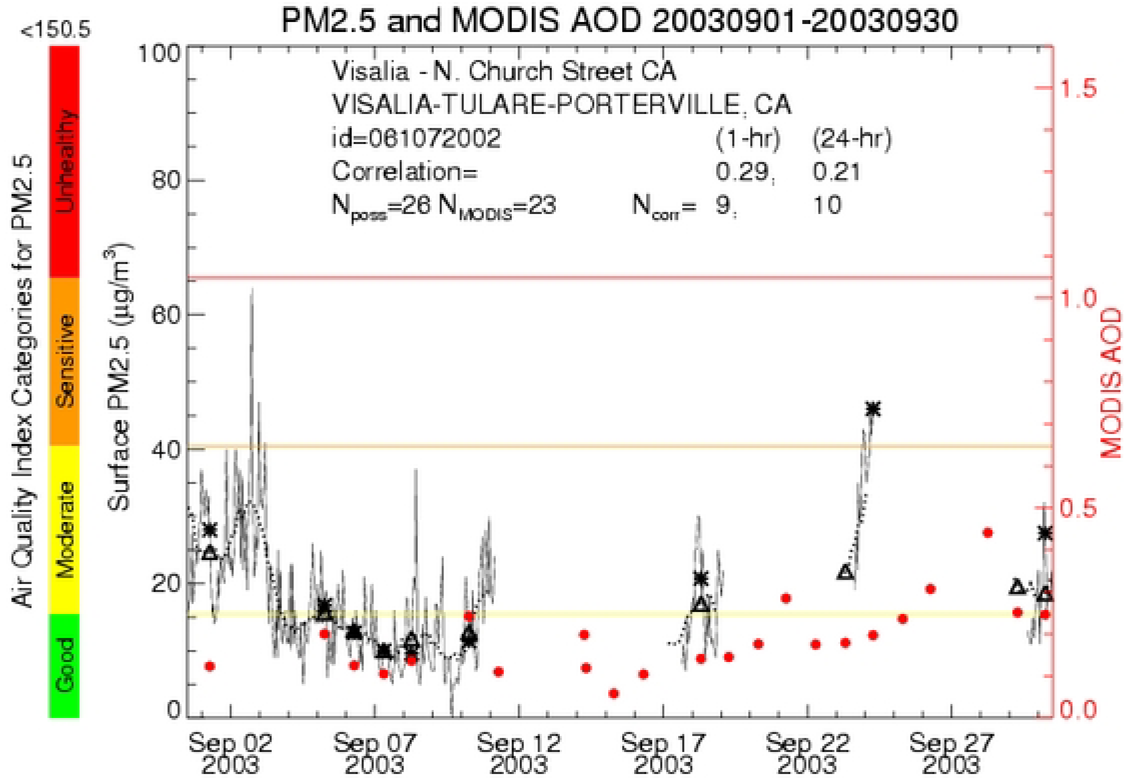

PM2.5 and MODIS AOD 20030901-20030930
<150.5
San Jose - Jackson St. CA
SAN JOSE, CA
id=060850005 (1-hr) (24-hr)
Correlation= 0.15, -0.01
N_poss=23 N_MODIS=21 N_corr= 20, 21
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

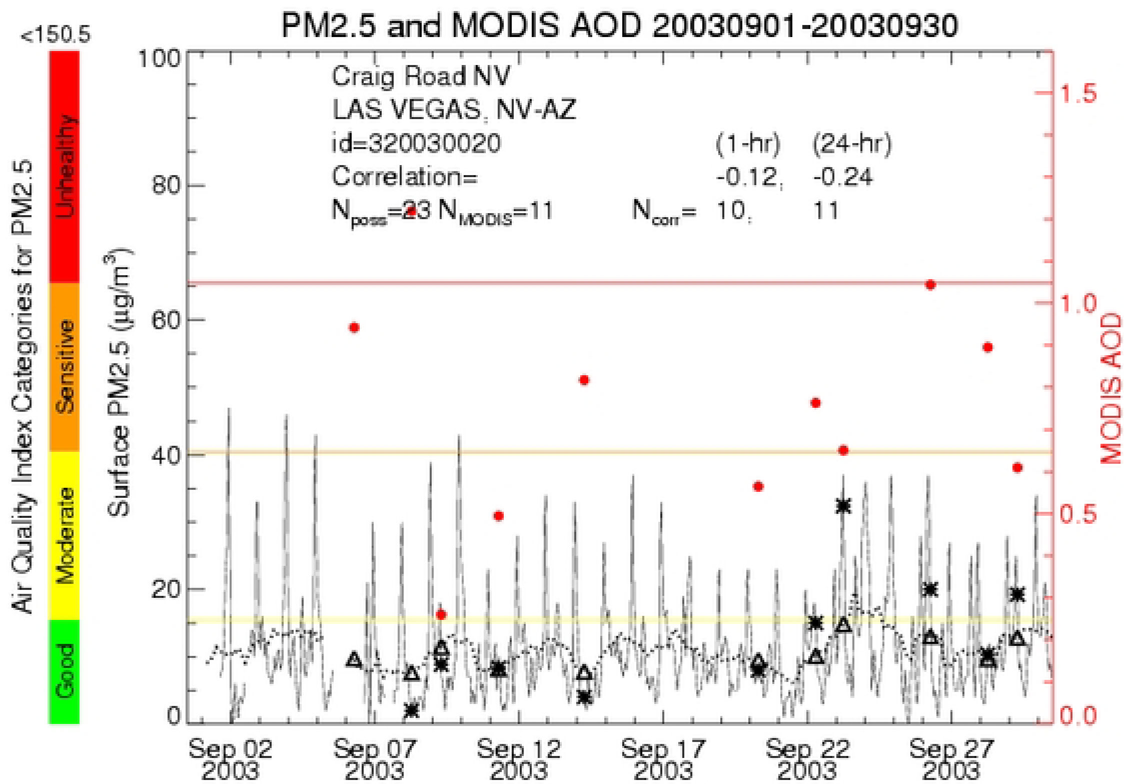


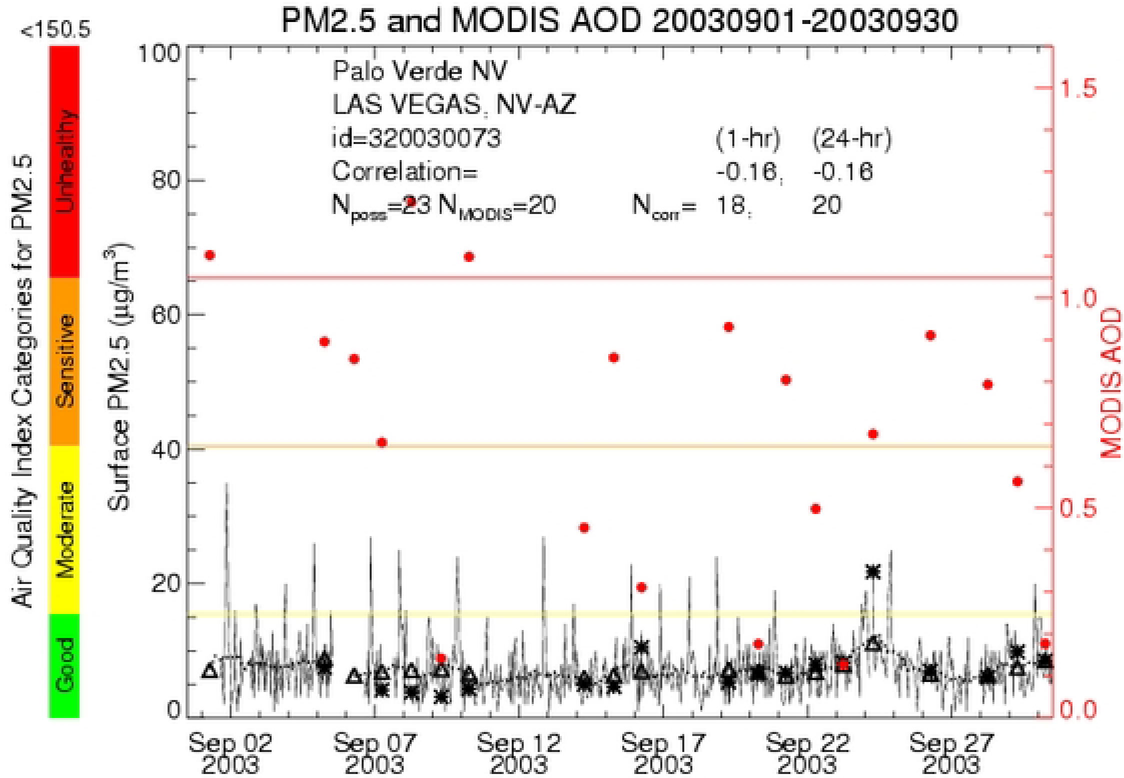
PM2.5 and MODIS AOD 20030901-20030930
Vallejo - 304 Tuolumne Street CA
VALLEJO-FAIRFIELD-NAPA, CA
id=060950004 (1-hr) (24-hr)
Correlation= 0.01, 0.24
N_poss=23 N_MODIS=19 N_corr= 18, 19
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

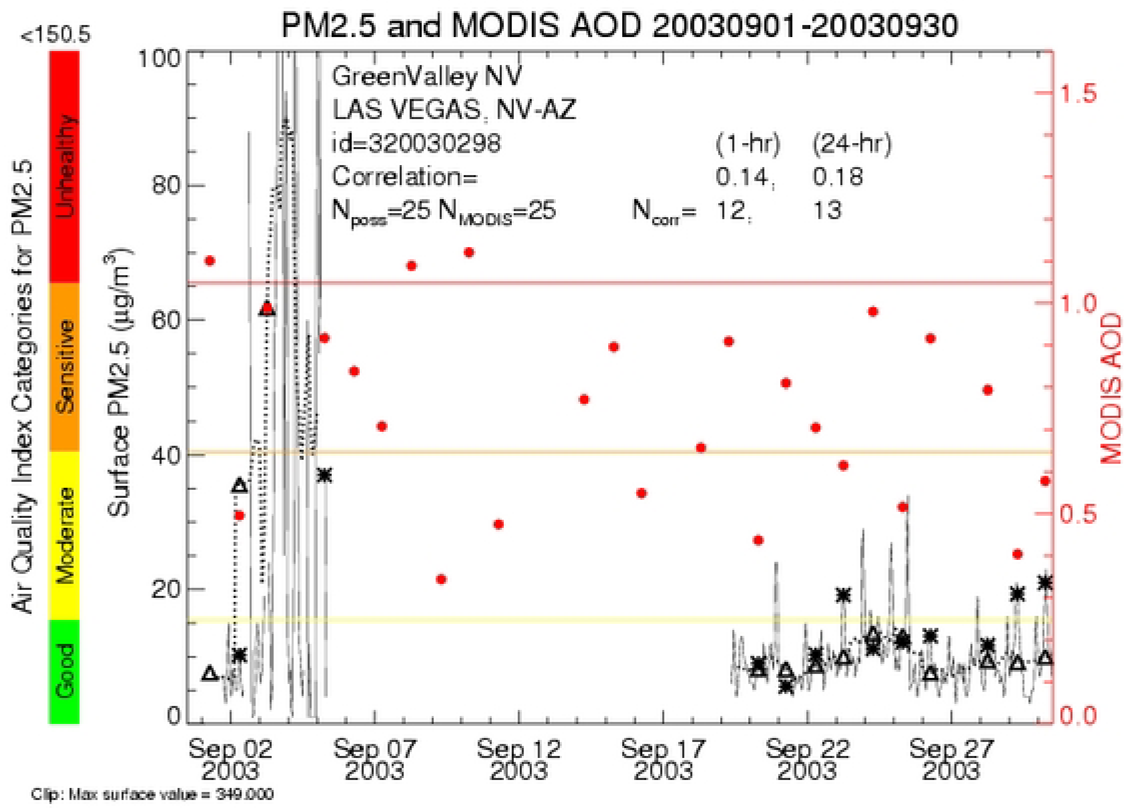


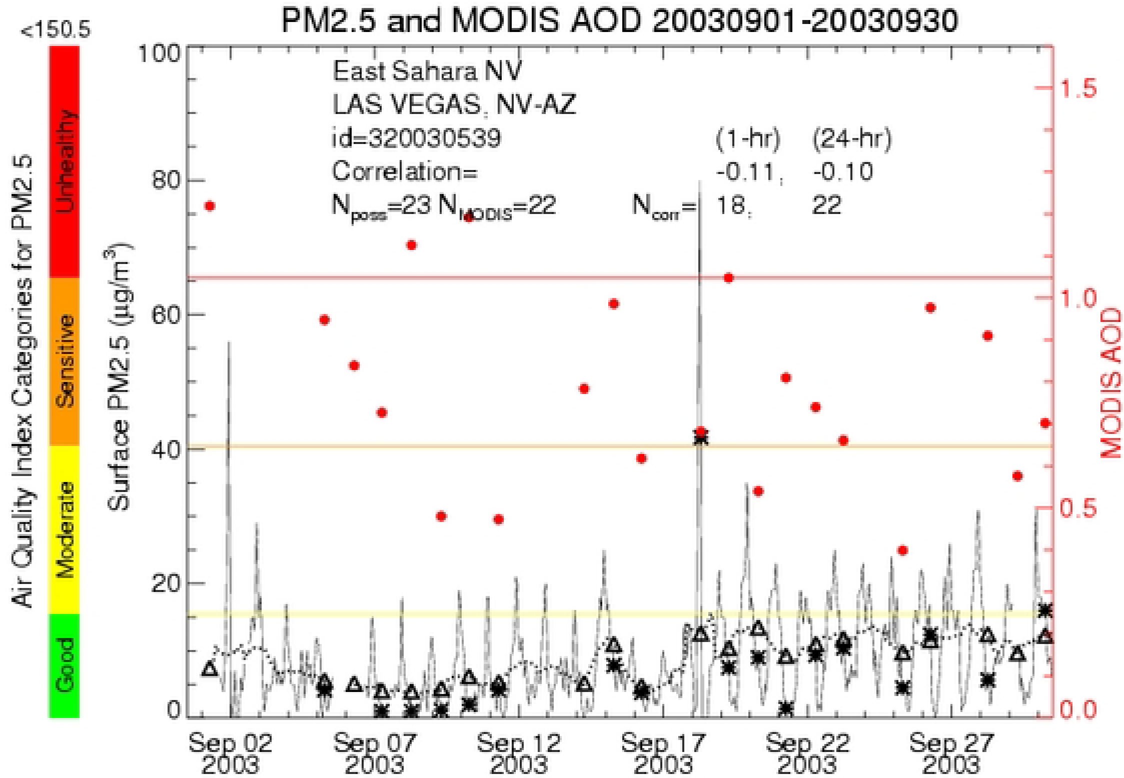
PM2.5 and MODIS AOD 20030901-20030930
Modesto - 14th Street CA
MODESTO, CA
id=060990005 (1-hr) (24-hr)
Correlation= 0.23, 0.08
N_poss=23 N_MODIS=22 N_corr= 10, 11
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Visalia - N. Church Street CA
VISALIA-TULARE-PORTERVILLE, CA
id=061072002
(1-hr) (24-hr)
Correlation= 0.29, 0.21
Nposs=26 NMODIS=23 Ncorr= 9, 10
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

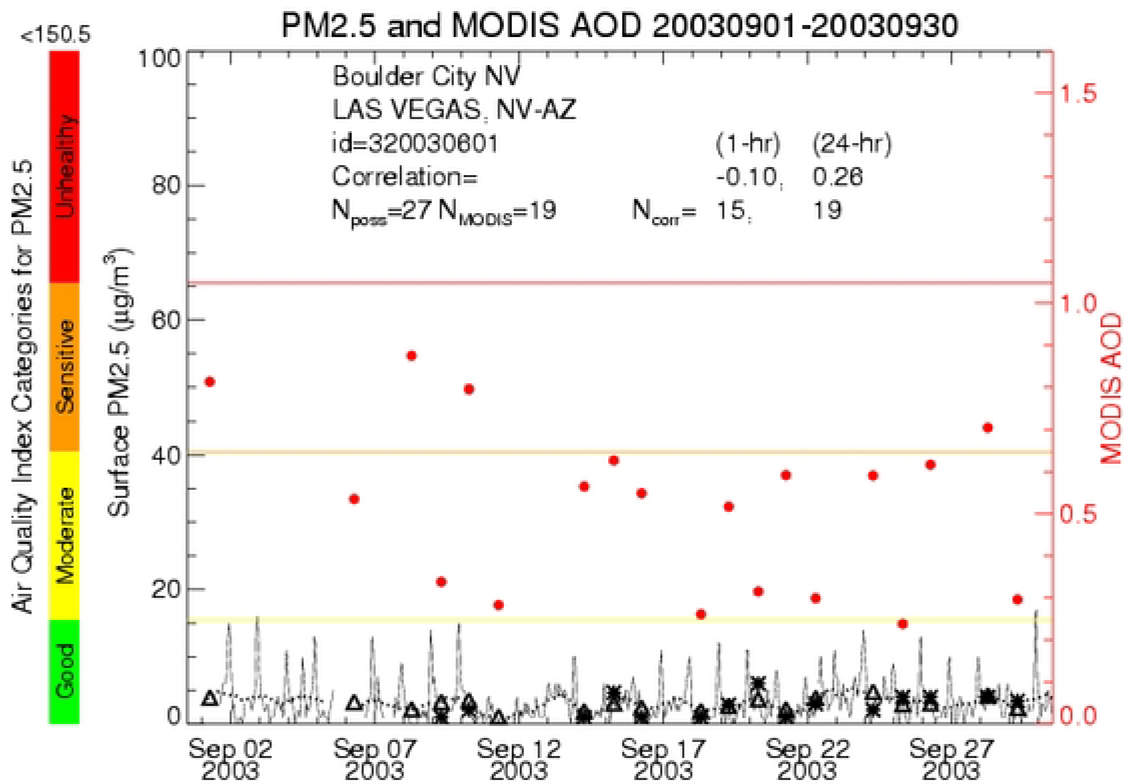

PM2.5 and MODIS AOD 20030901-20030930
Craig Road NV
LAS VEGAS, NV-AZ
id=320030020
(1-hr) (24-hr)
Correlation= -0.12, -0.24
Nposs=23 NMODIS=11 Ncorr= 10, 11
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Palo Verde NV
LAS VEGAS, NV-AZ
id=320030073
(1-hr) (24-hr)
Correlation= -0.16, -0.16
Nposs=23 NMODIS=20 Ncorr= 18, 20
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

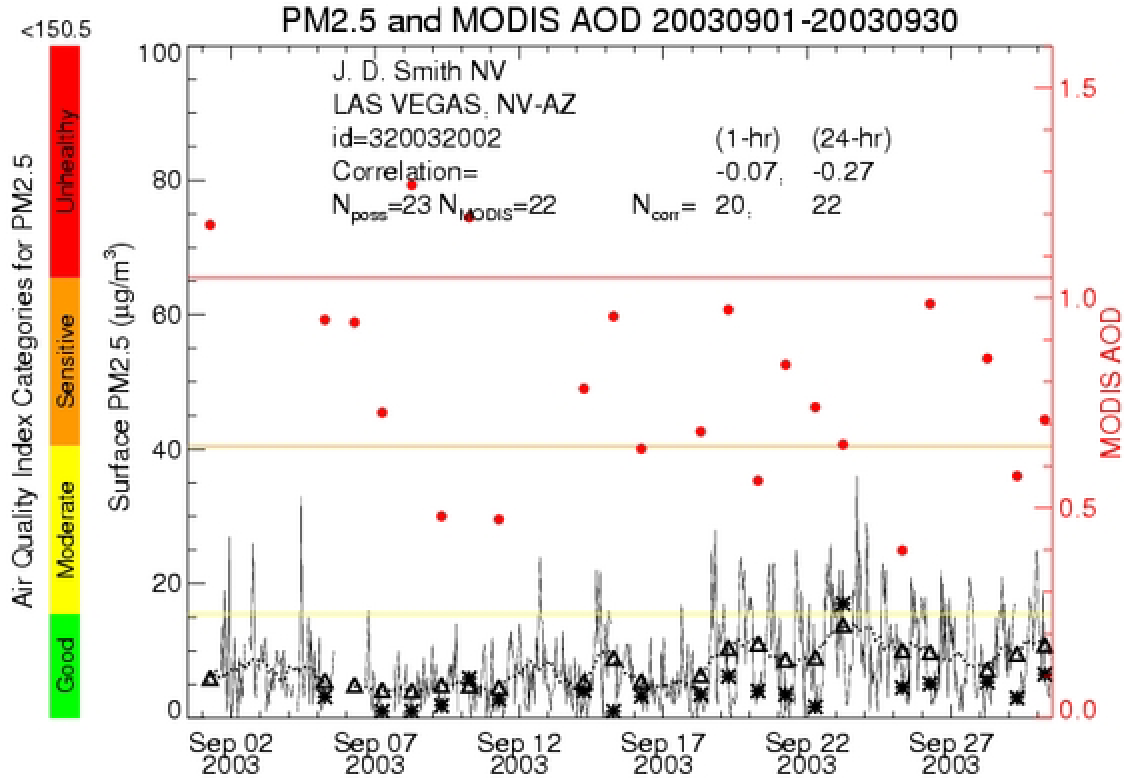

PM2.5 and MODIS AOD 20030901-20030930
<150.5
GreenValley NV
LAS VEGAS, NV-AZ
id=320030298
(1-hr) (24-hr)
Correlation= 0.14, 0.18
Nposs=25 NMODIS=25 Ncorr= 12, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 349.000



PM2.5 and MODIS AOD 20030901-20030930
East Sahara NV
LAS VEGAS, NV-AZ
id=320030539
(1-hr) (24-hr)
Correlation= -0.11, -0.10
N_{poss}=23 N_{MODIS}=22 N_{corr}= 18, 22
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

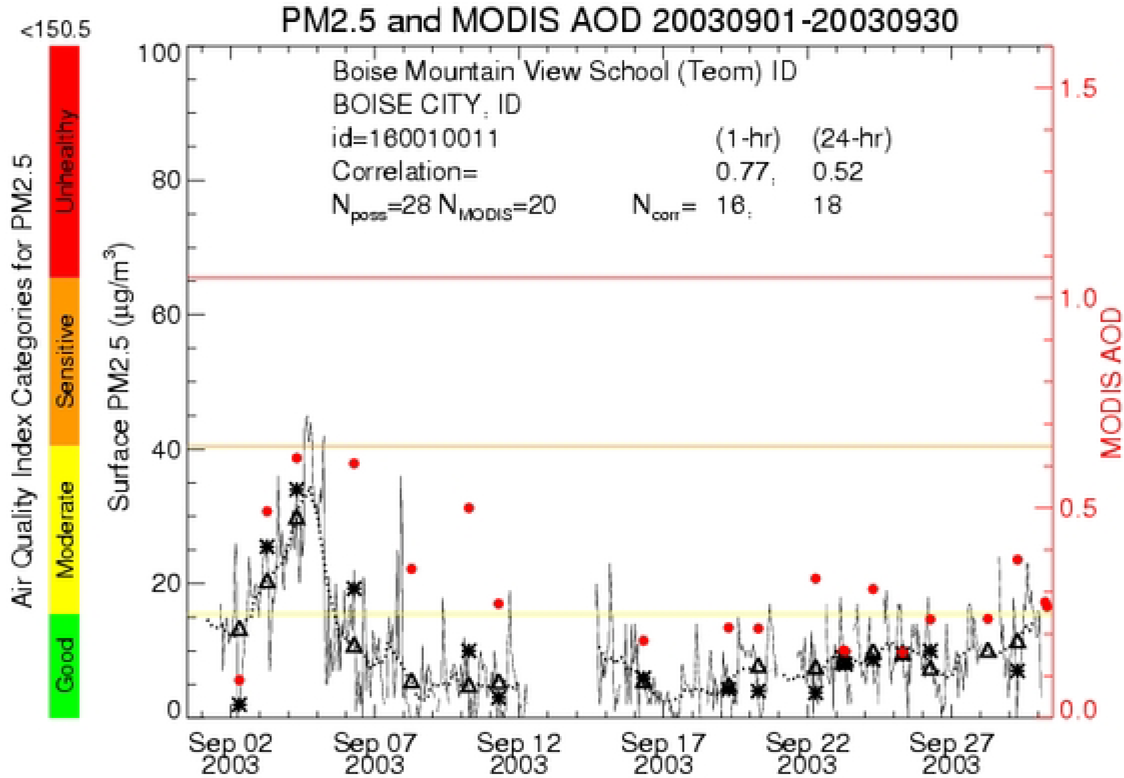


PM2.5 and MODIS AOD 20030901-20030930
Boulder City NV
LAS VEGAS, NV-AZ
id=320030601
(1-hr) (24-hr)
Correlation= -0.10, 0.26
N_{poss}=27 N_{MODIS}=19 N_{corr}= 15, 19
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

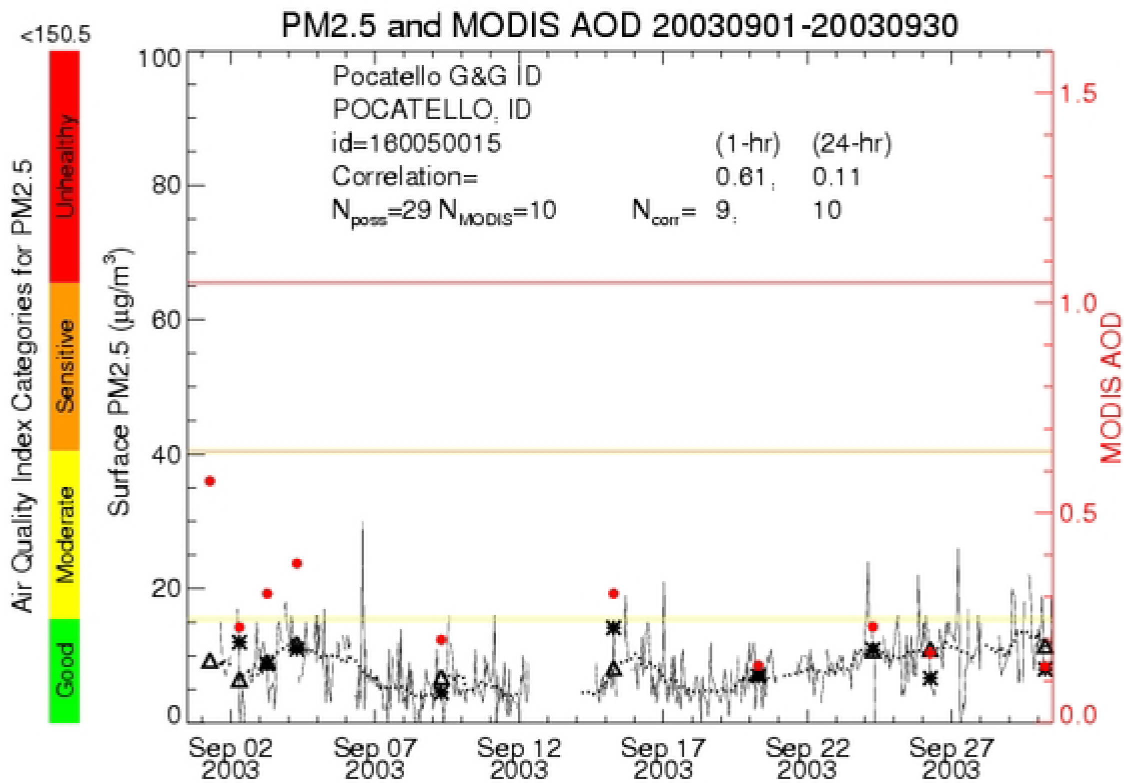


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
J. D. Smith NV
LAS VEGAS, NV-AZ
id=320032002
Correlation=
Nposs=23 NMODIS=22
Ncorr=
(1-hr)
(24-hr)
-0.07,
-0.27
20,
22
0
20
40
60
80
100
0.0
0.5
1.0
1.5
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

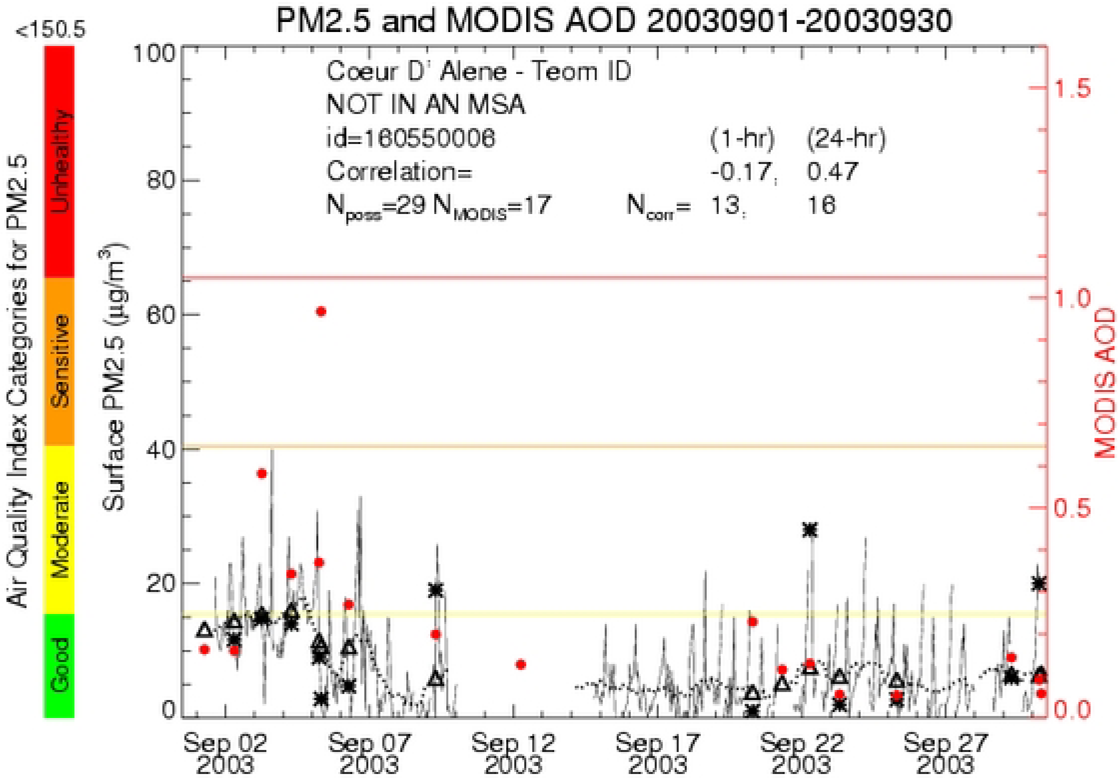
Region 10



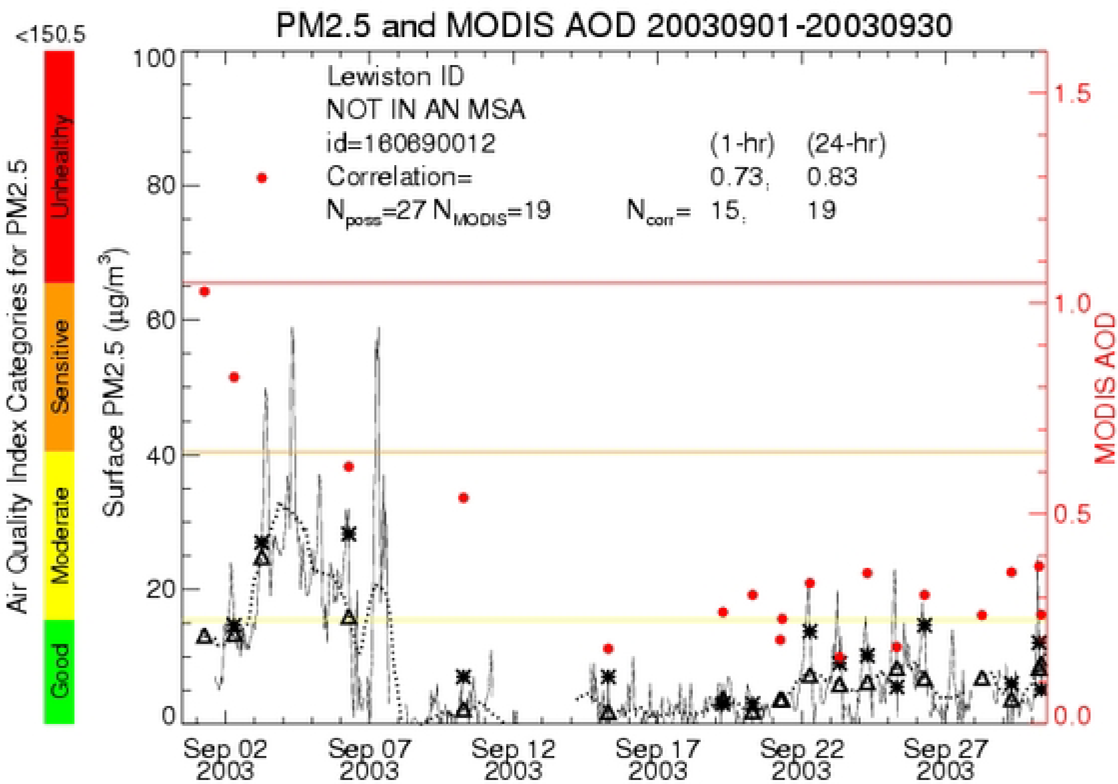
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Boise Mountain View School (Teom) ID
BOISE CITY, ID
id=160010011
(1-hr) (24-hr)
Correlation= 0.77, 0.52
N_{poss}=28 N_{MODIS}=20 N_{corr}= 16, 18
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



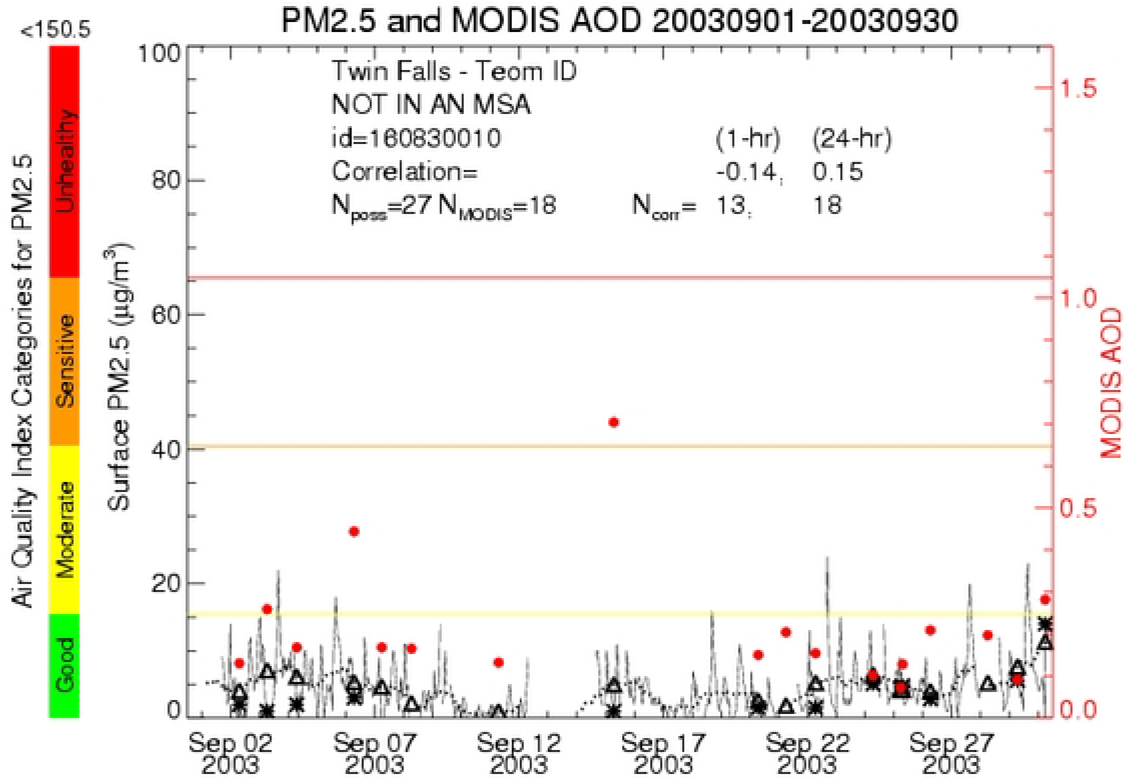
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Pocatello G&G ID
POCATELLO, ID
id=160050015
(1-hr) (24-hr)
Correlation= 0.61, 0.11
N_{poss}=29 N_{MODIS}=10 N_{corr}= 9, 10
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

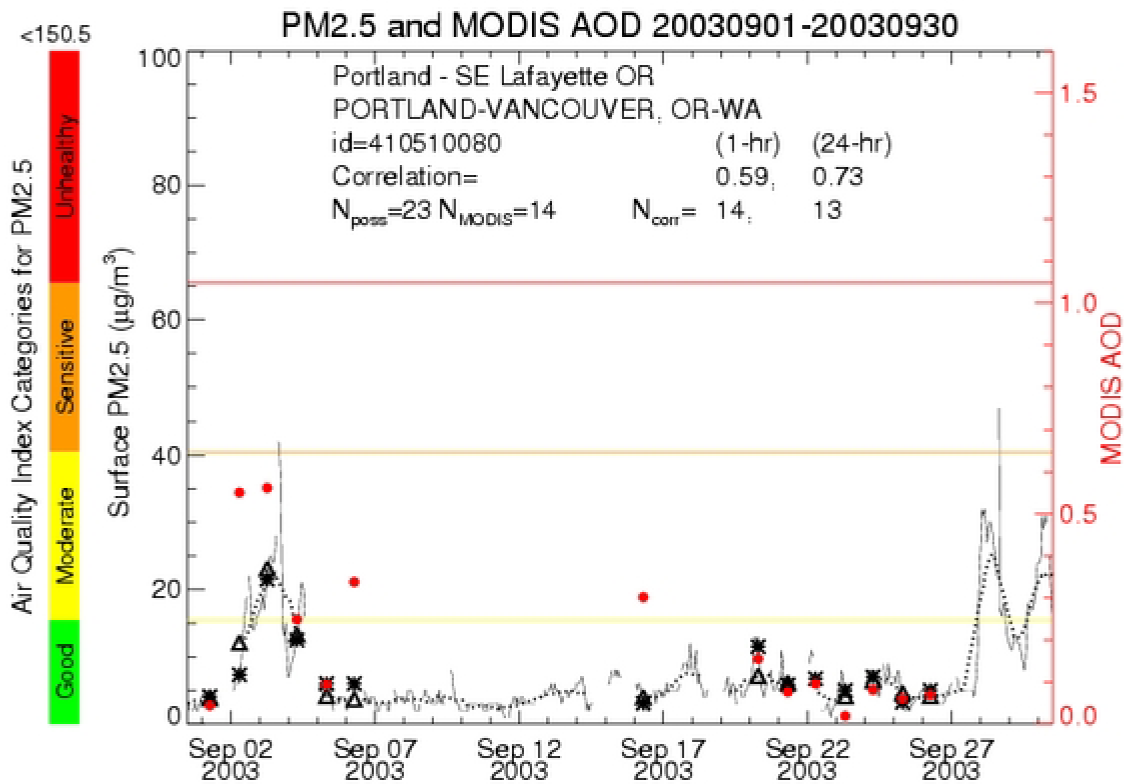


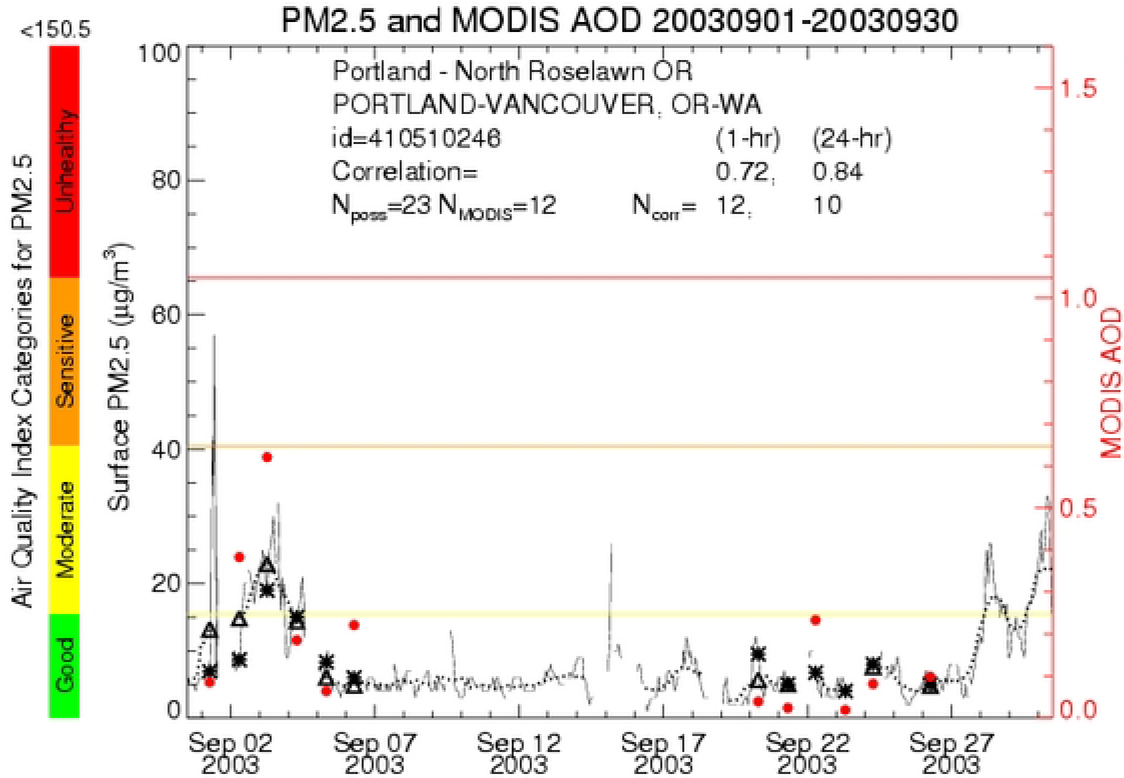
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Coeur D' Alene - Teom ID
NOT IN AN MSA
id=160550006
(1-hr) (24-hr)
Correlation= -0.17; 0.47
N_poss=29 N_MODIS=17 N_corr= 13; 16
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



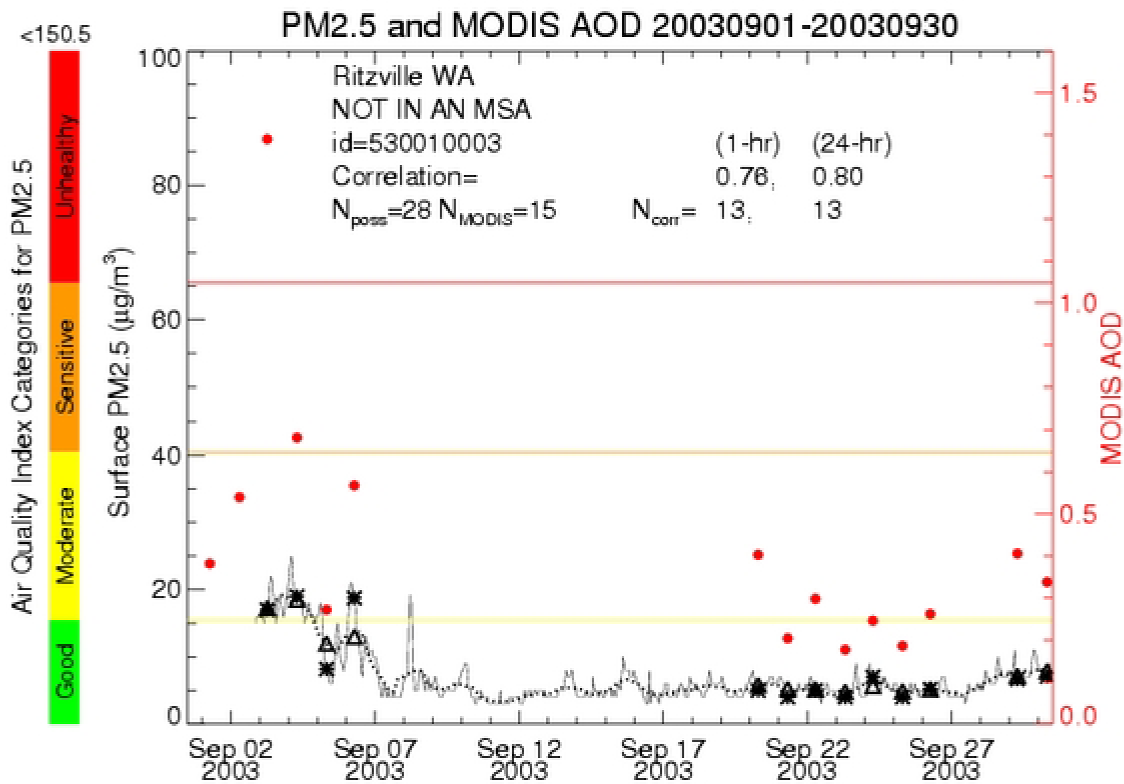
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Lewiston ID
NOT IN AN MSA
id=160690012
(1-hr) (24-hr)
Correlation= 0.73; 0.83
N_poss=27 N_MODIS=19 N_corr= 15; 19
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Twin Falls - Teom ID
NOT IN AN MSA
id=160830010
(1-hr) (24-hr)
Correlation= -0.14, 0.15
Nposs=27 NMODIS=18 Ncorr= 13, 18
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

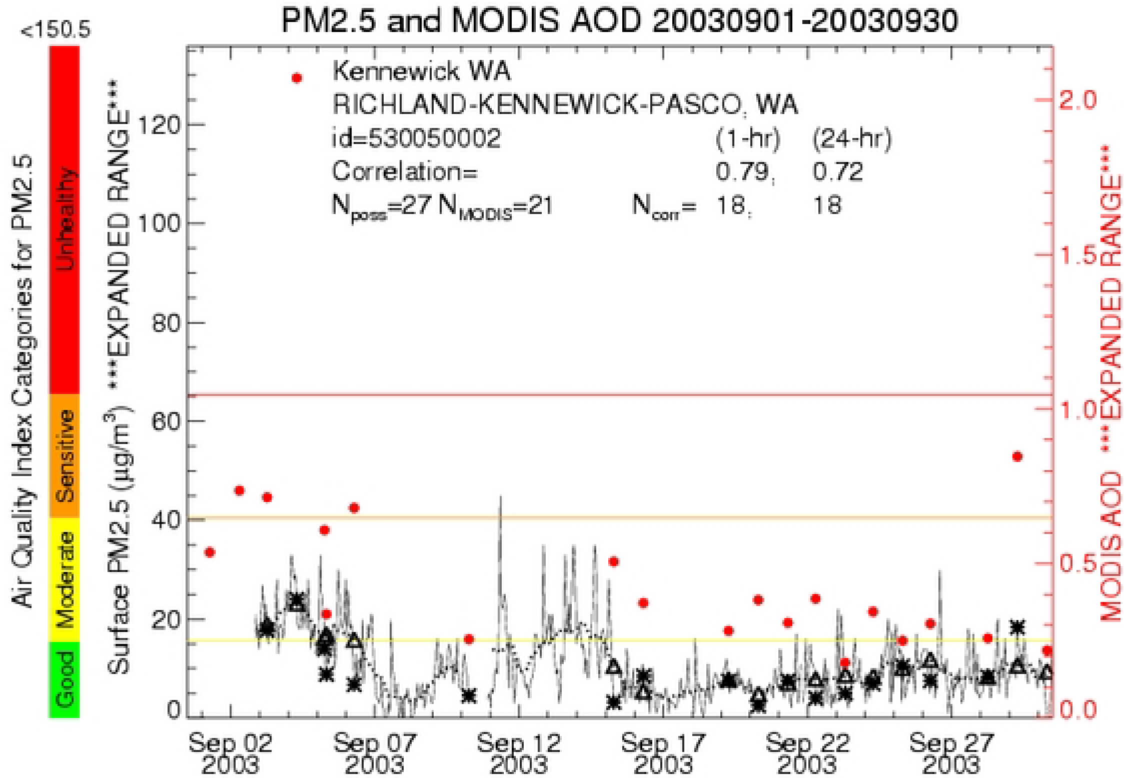

PM2.5 and MODIS AOD 20030901-20030930
Portland - SE Lafayette OR
PORTLAND-VANCOUVER, OR-WA
id=410510080
(1-hr) (24-hr)
Correlation= 0.59, 0.73
Nposs=23 NMODIS=14 Ncorr= 14, 13
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



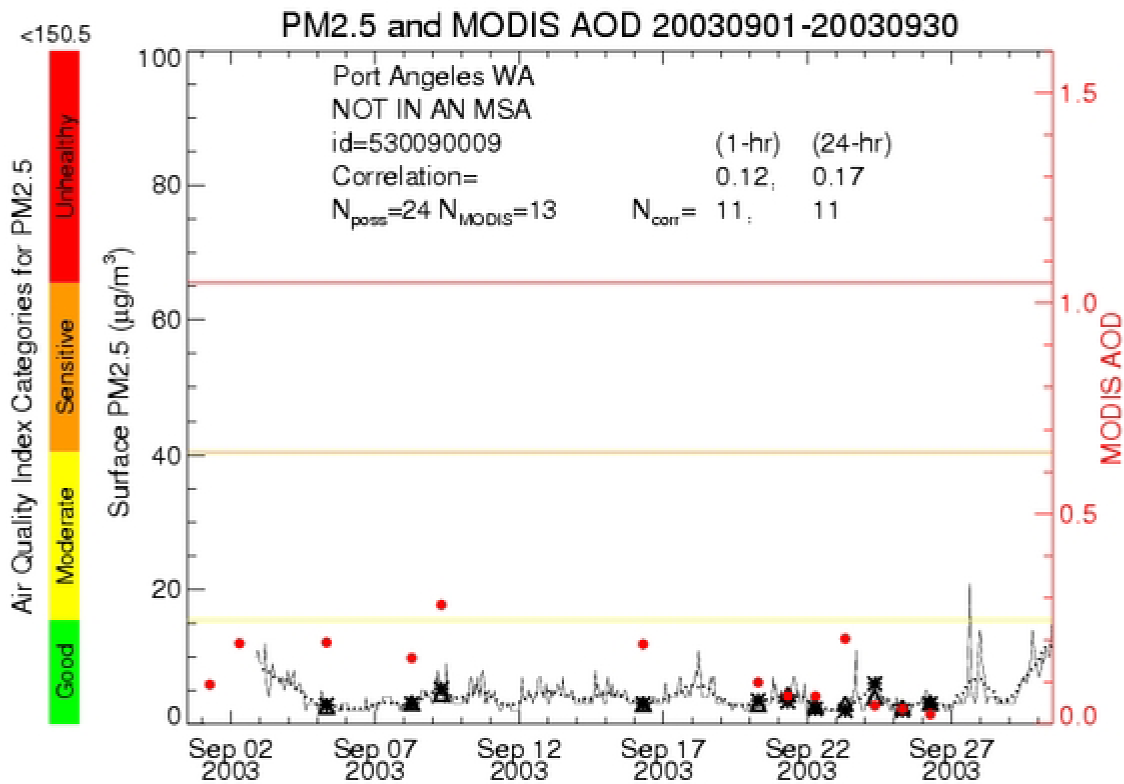
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Portland - North Roselawn OR
PORTLAND-VANCOUVER, OR-WA
id=410510246 (1-hr) (24-hr)
Correlation= 0.72; 0.84
Nposs=23 NMODIS=12 Ncorr= 12; 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



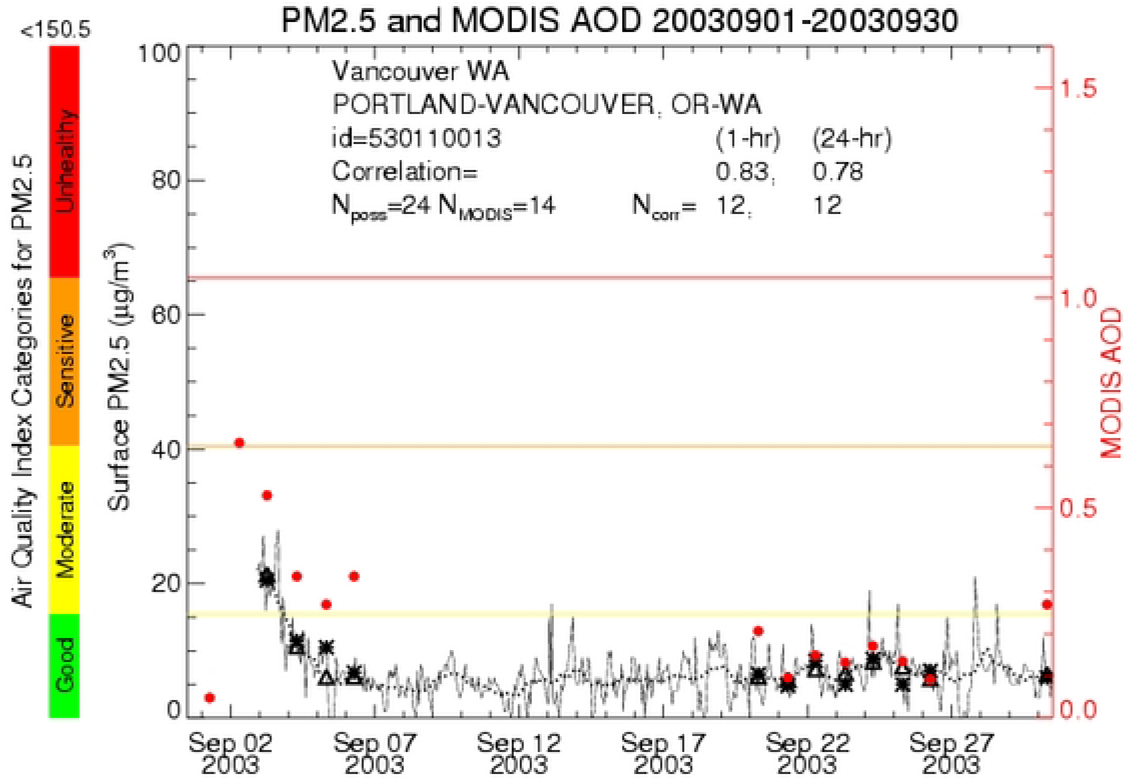
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Ritzville WA
NOT IN AN MSA
id=530010003 (1-hr) (24-hr)
Correlation= 0.76; 0.80
Nposs=28 NMODIS=15 Ncorr= 13; 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



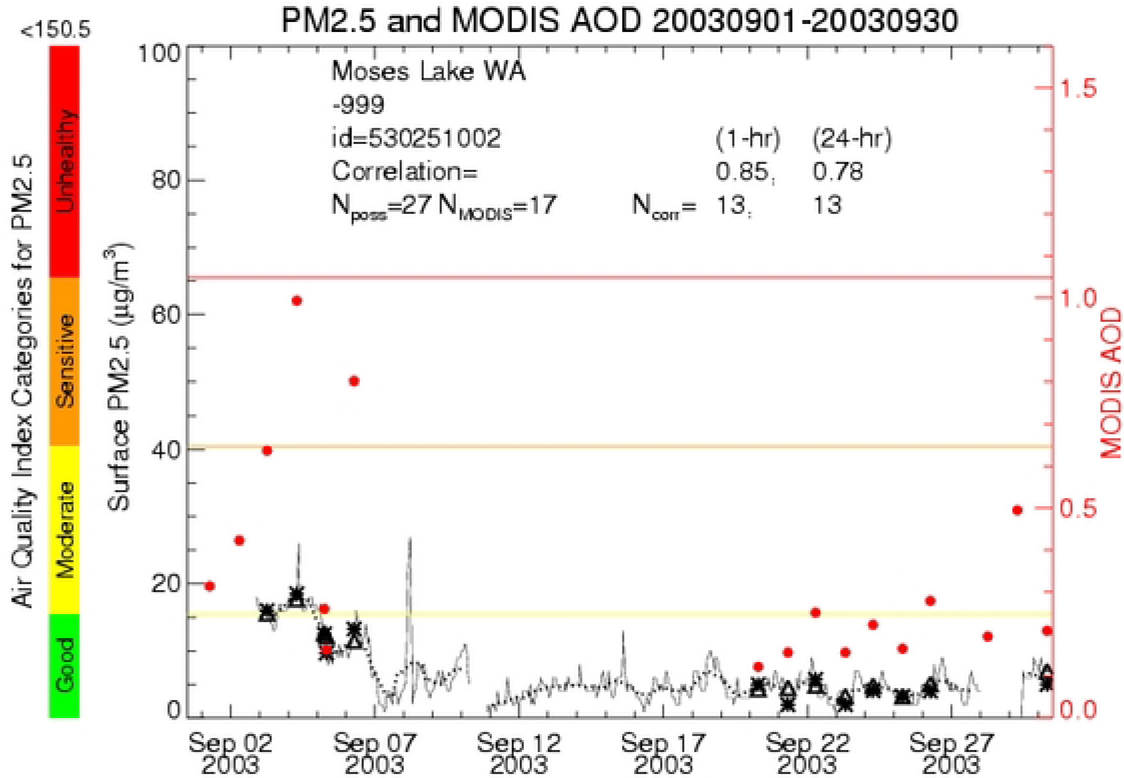
PM2.5 and MODIS AOD 20030901-20030930
Kennewick WA
RICHLAND-KENNEWICK-PASCO, WA
id=530050002 (1-hr) (24-hr)
Correlation= 0.79, 0.72
N_{poss}=27 N_{MODIS}=21 N_{corr}= 18, 18
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³) ***EXPANDED RANGE***
MODIS AOD ***EXPANDED RANGE***
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



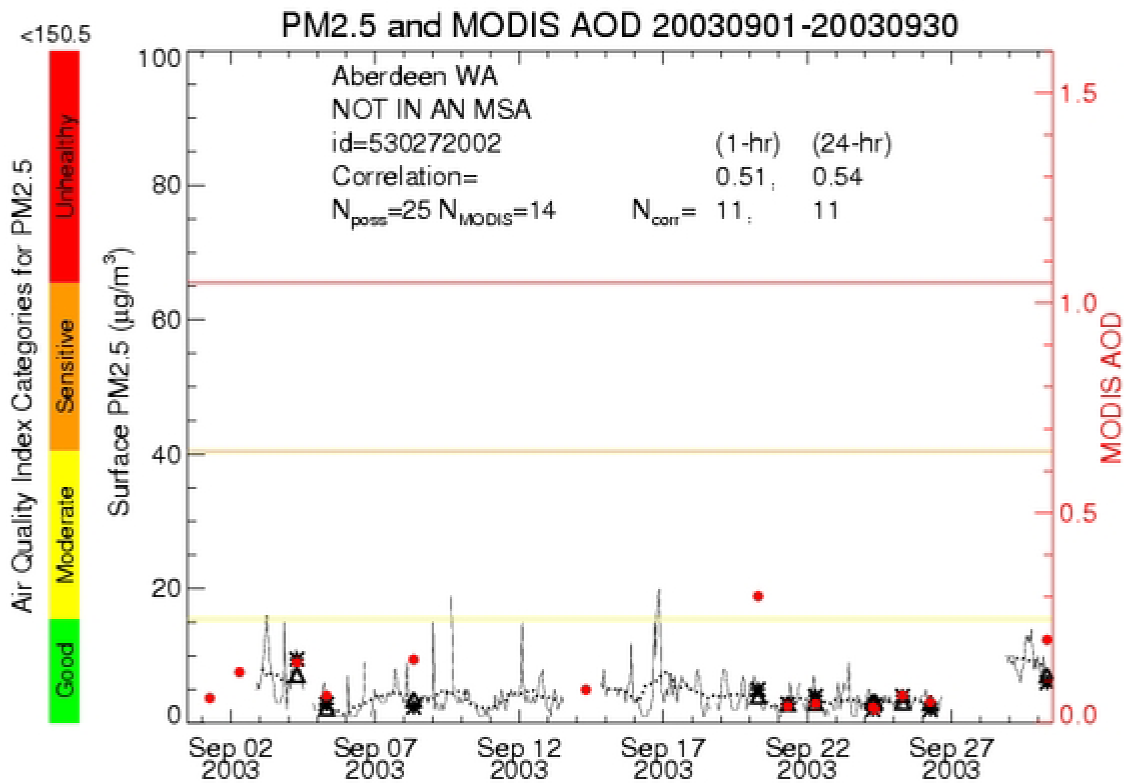
PM2.5 and MODIS AOD 20030901-20030930
Port Angeles WA
NOT IN AN MSA
id=530090009 (1-hr) (24-hr)
Correlation= 0.12, 0.17
N_{poss}=24 N_{MODIS}=13 N_{corr}= 11, 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

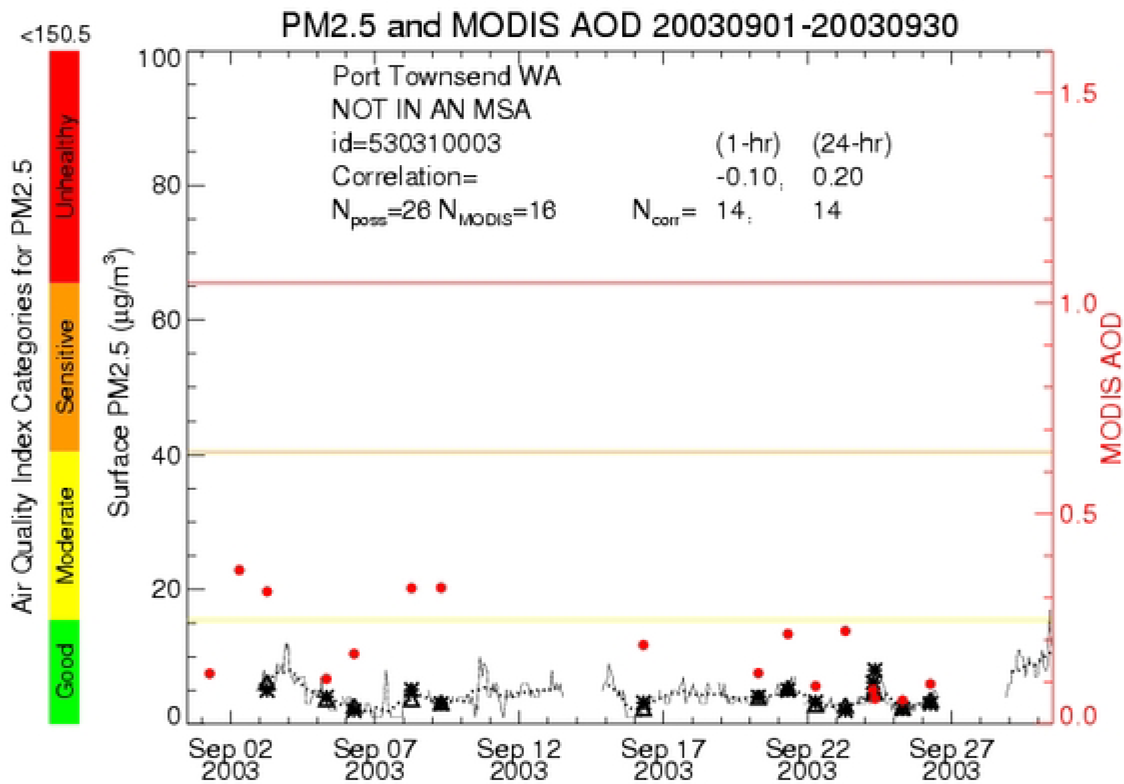


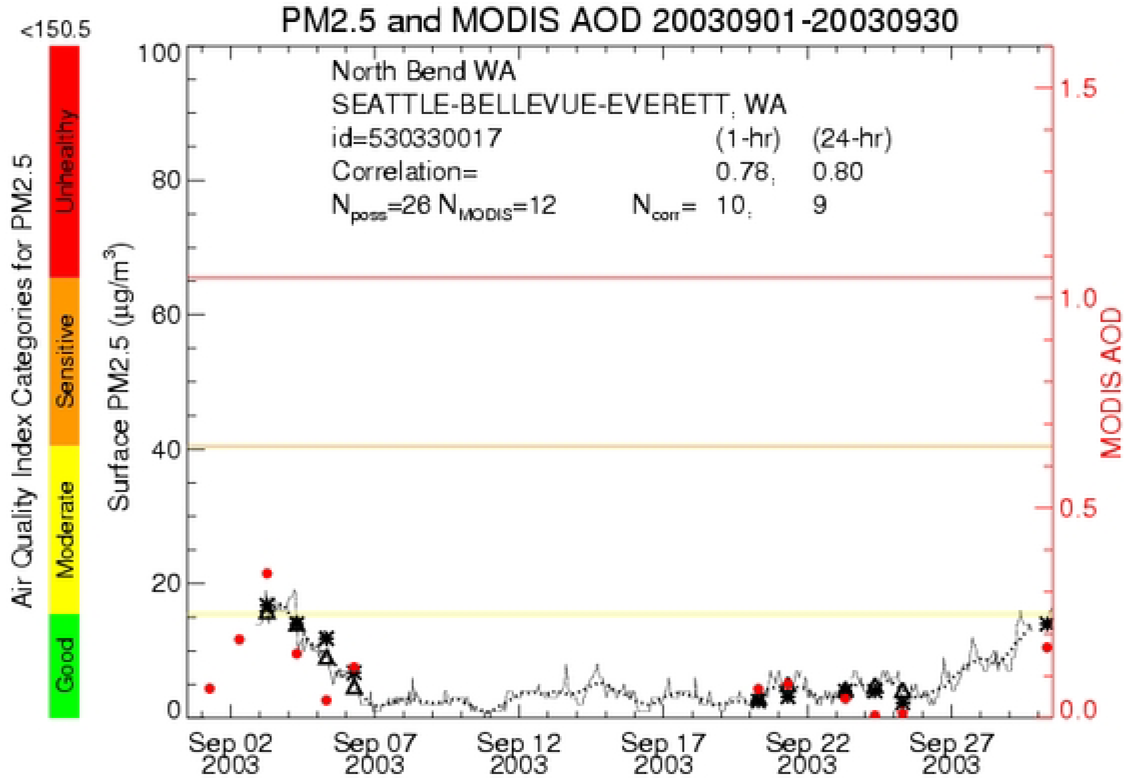
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Vancouver WA
PORTLAND-VANCOUVER, OR-WA
id=530110013 (1-hr) (24-hr)
Correlation= 0.83, 0.78
Nposs=24 NMODIS=14 Ncorr= 12, 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

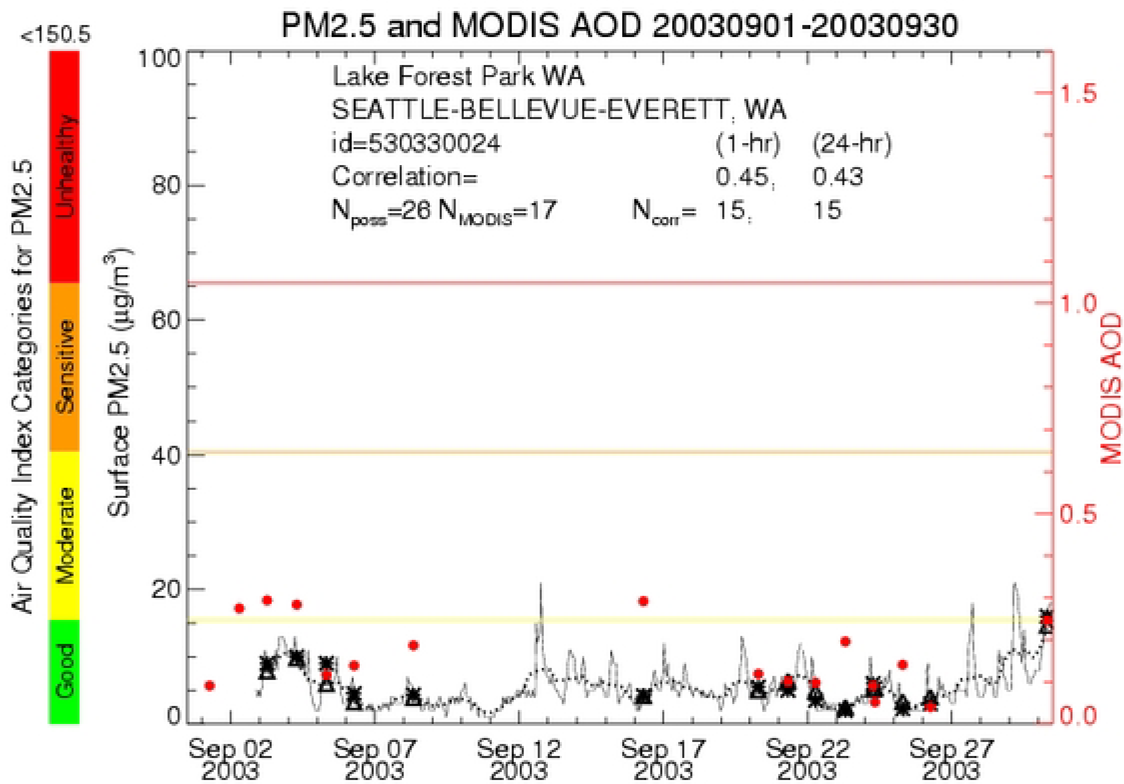


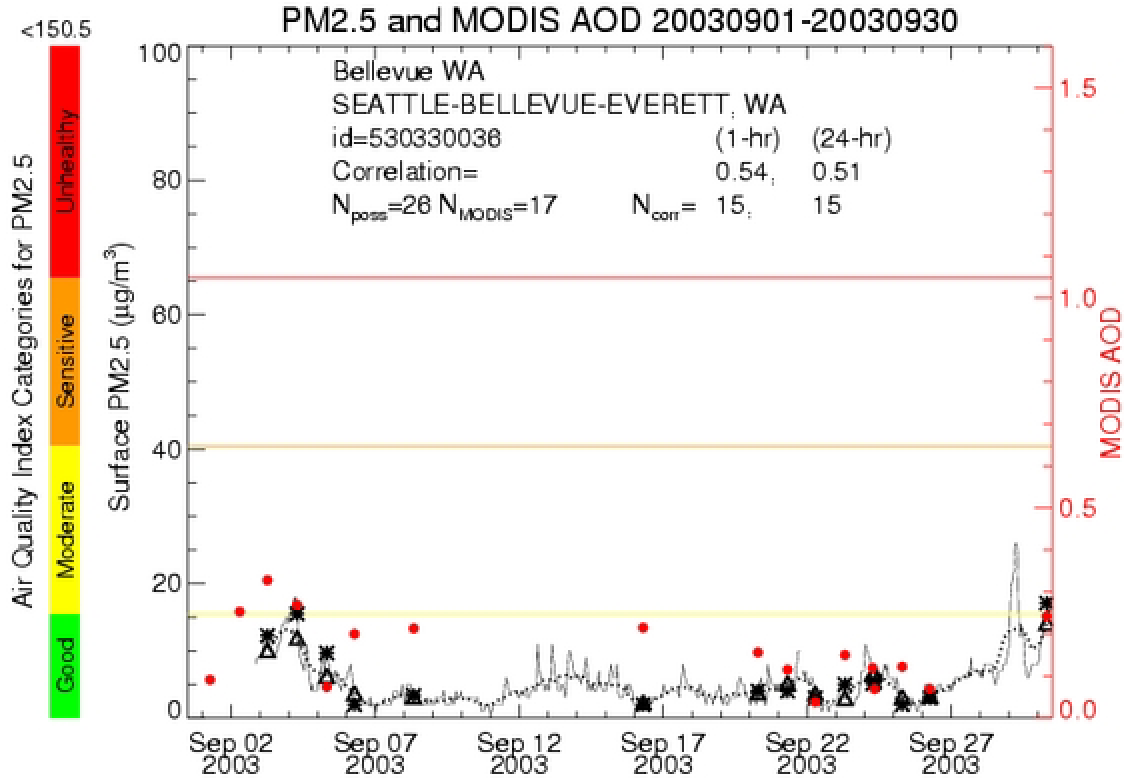
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Moses Lake WA
-999
id=530251002 (1-hr) (24-hr)
Correlation= 0.85, 0.78
Nposs=27 NMODIS=17 Ncorr= 13, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

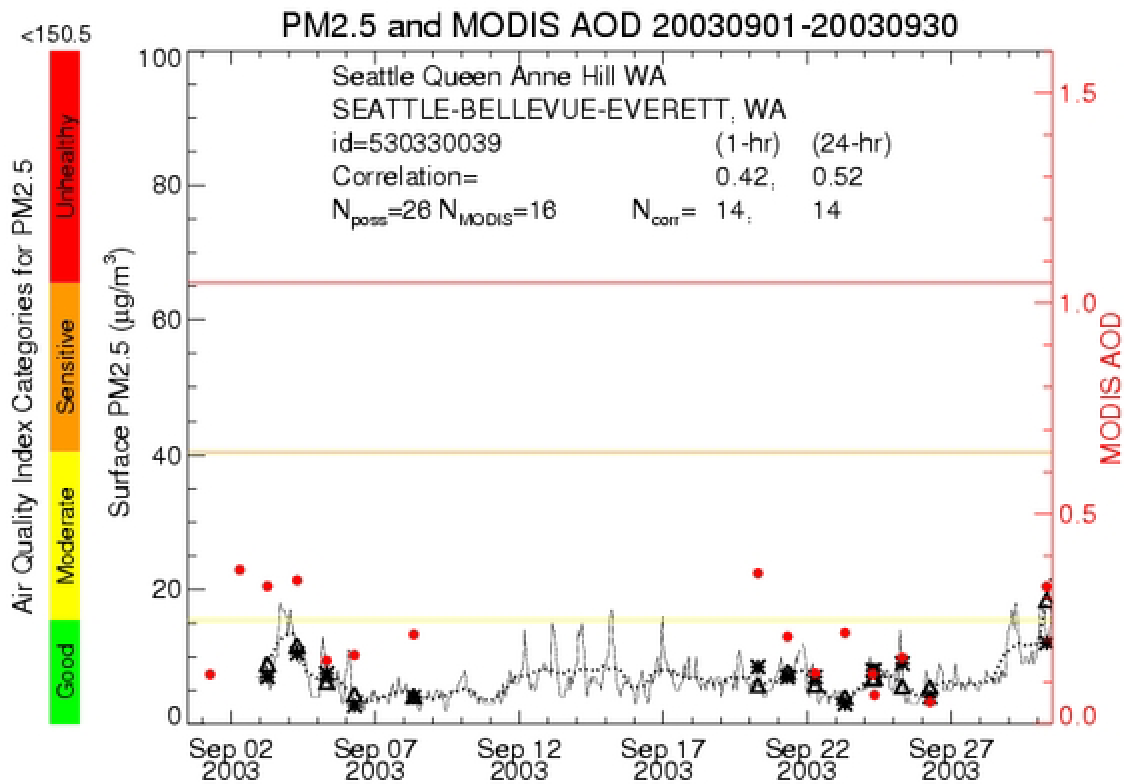

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m3)
MODIS AOD
Aberdeen WA
NOT IN AN MSA
id=530272002
Correlation=
(1-hr) (24-hr)
0.51; 0.54
Nposs=25 NMODIS=14 Ncorr= 11; 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

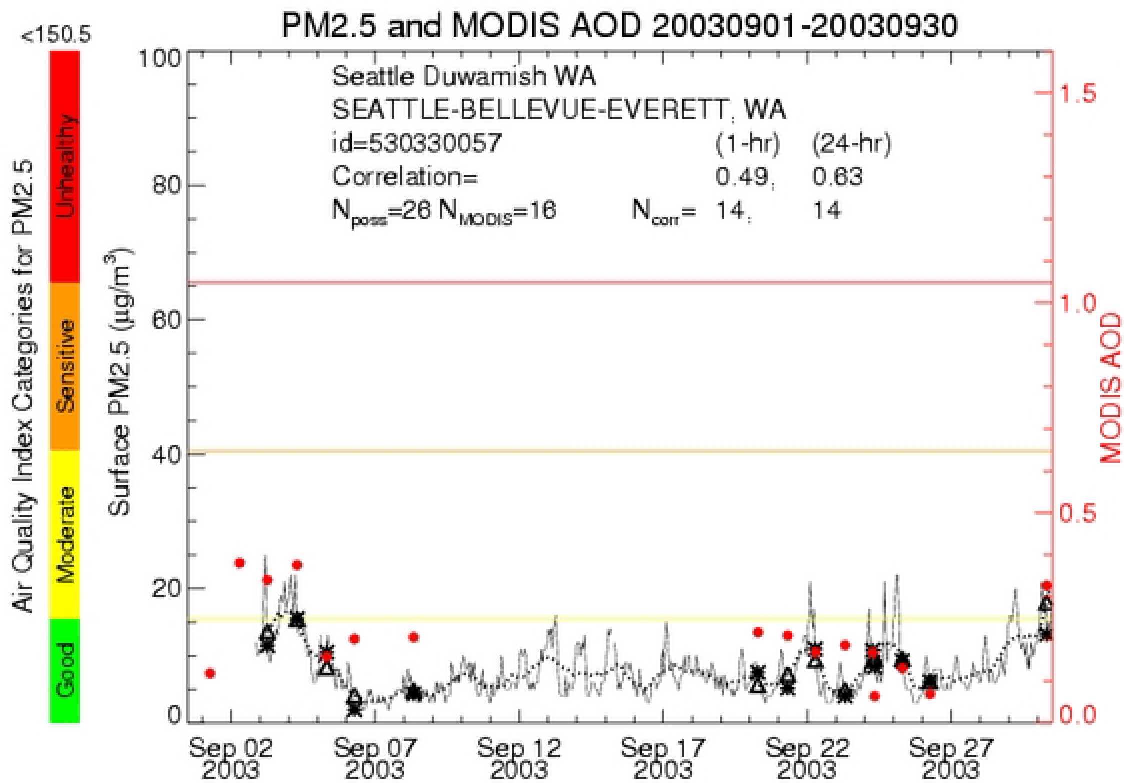

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m3)
MODIS AOD
Port Townsend WA
NOT IN AN MSA
id=530310003
Correlation=
(1-hr) (24-hr)
-0.10; 0.20
Nposs=26 NMODIS=16 Ncorr= 14; 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

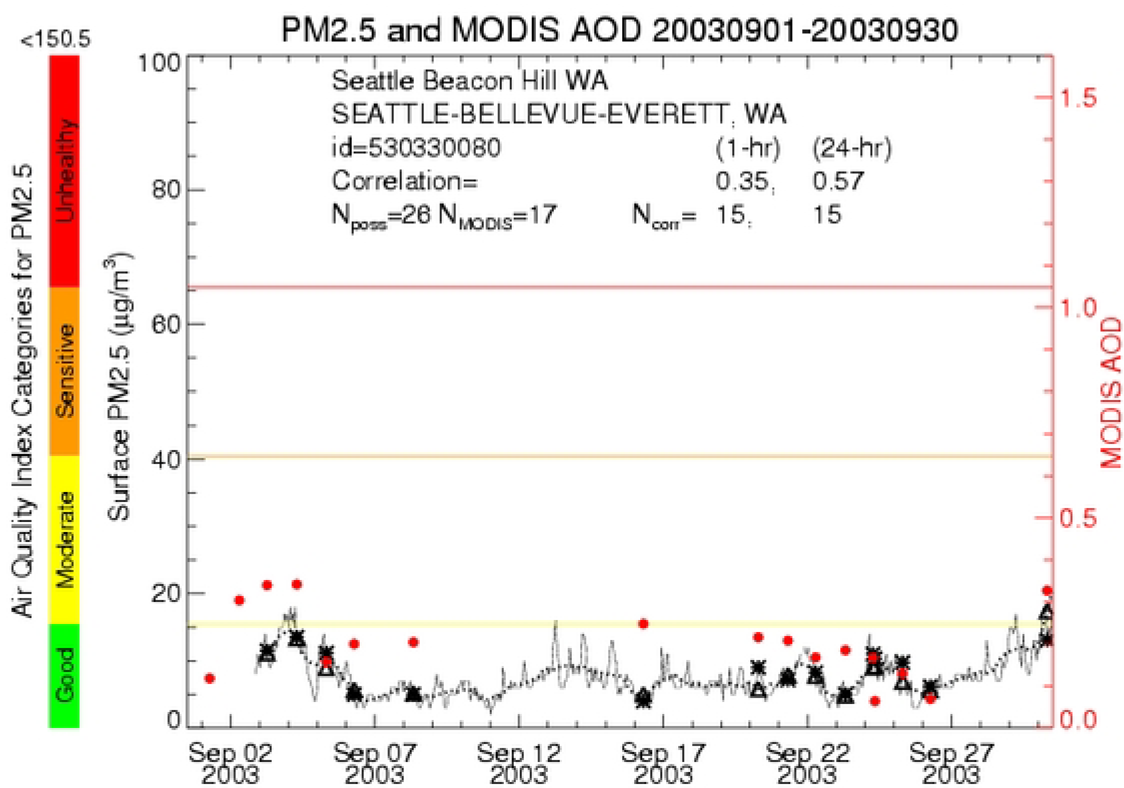

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
North Bend WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530330017 (1-hr) (24-hr)
Correlation= 0.78, 0.80
Nposs=26 NMODIS=12 Ncorr= 10, 9
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

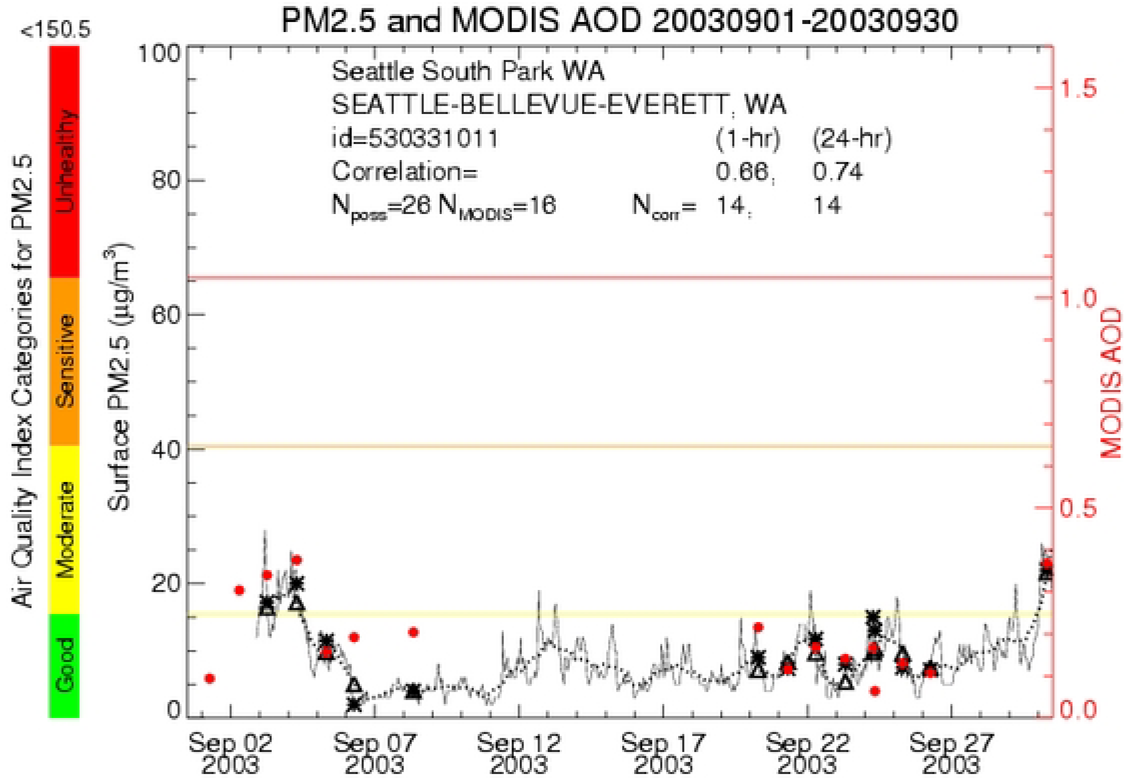

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m3)
MODIS AOD
Lake Forest Park WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530330024 (1-hr) (24-hr)
Correlation= 0.45, 0.43
Nposs=26 NMODIS=17 Ncorr= 15, 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

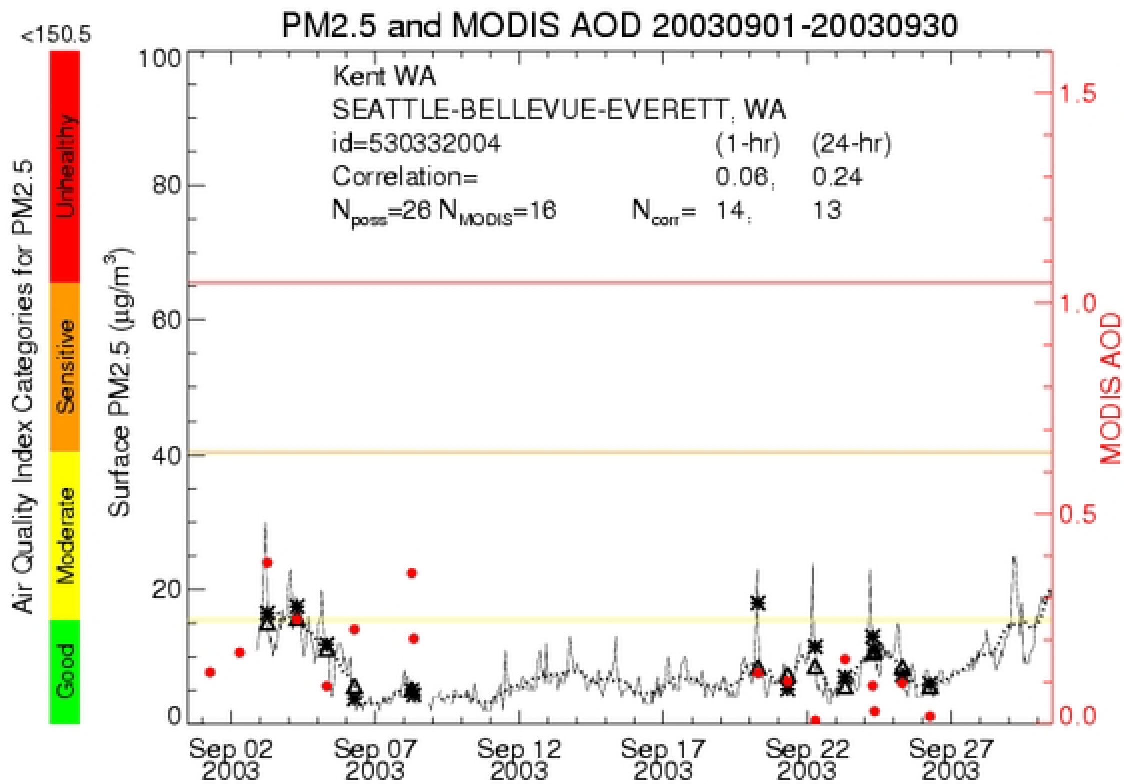

PM2.5 and MODIS AOD 20030901-20030930
Bellevue WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530330036 (1-hr) (24-hr)
Correlation= 0.54; 0.51
Nposs=26 NMODIS=17 Ncorr= 15; 15
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

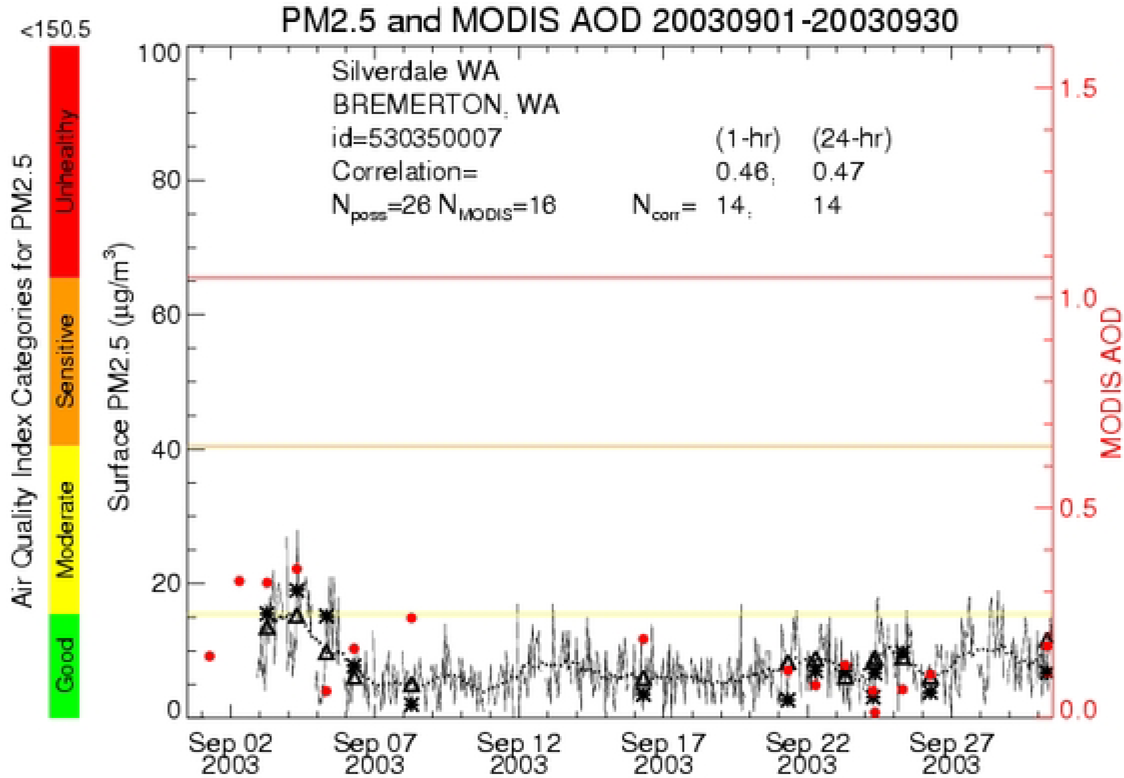

PM2.5 and MODIS AOD 20030901-20030930
Seattle Queen Anne Hill WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530330039 (1-hr) (24-hr)
Correlation= 0.42; 0.52
Nposs=26 NMODIS=16 Ncorr= 14; 14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

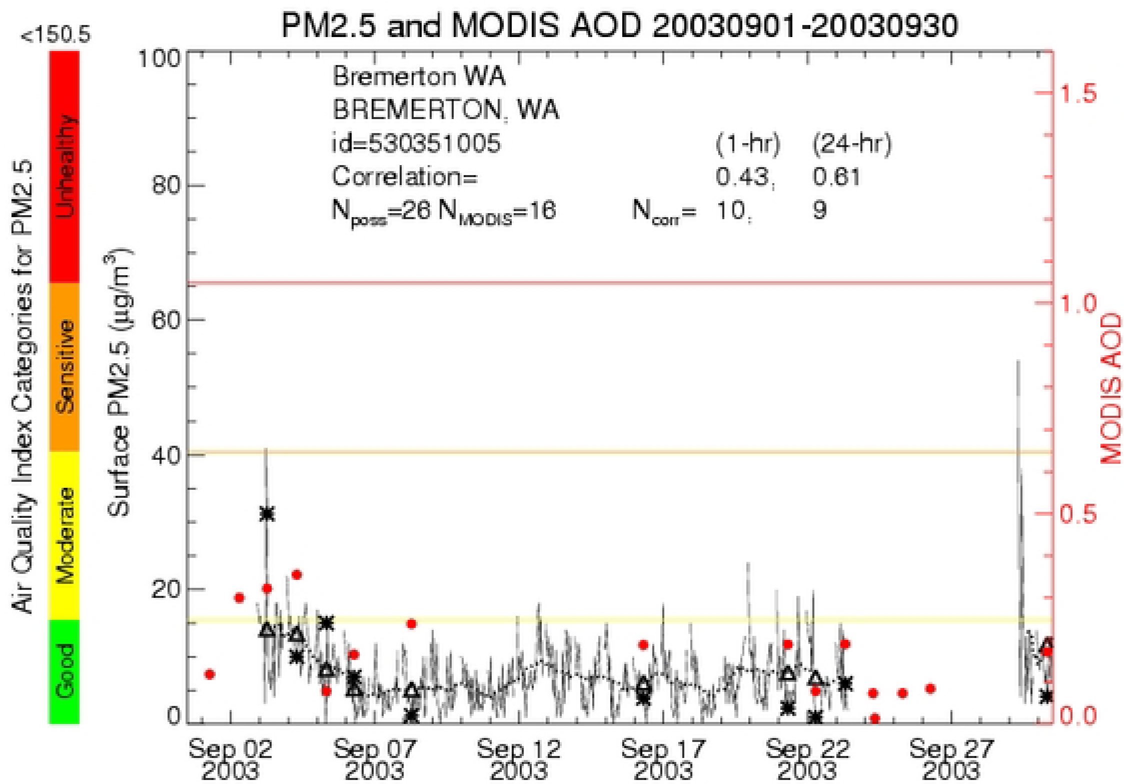

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Seattle Duwamish WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530330057 (1-hr) (24-hr)
Correlation= 0.49, 0.63
Nposs=26 NMODIS=16 Ncorr= 14, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

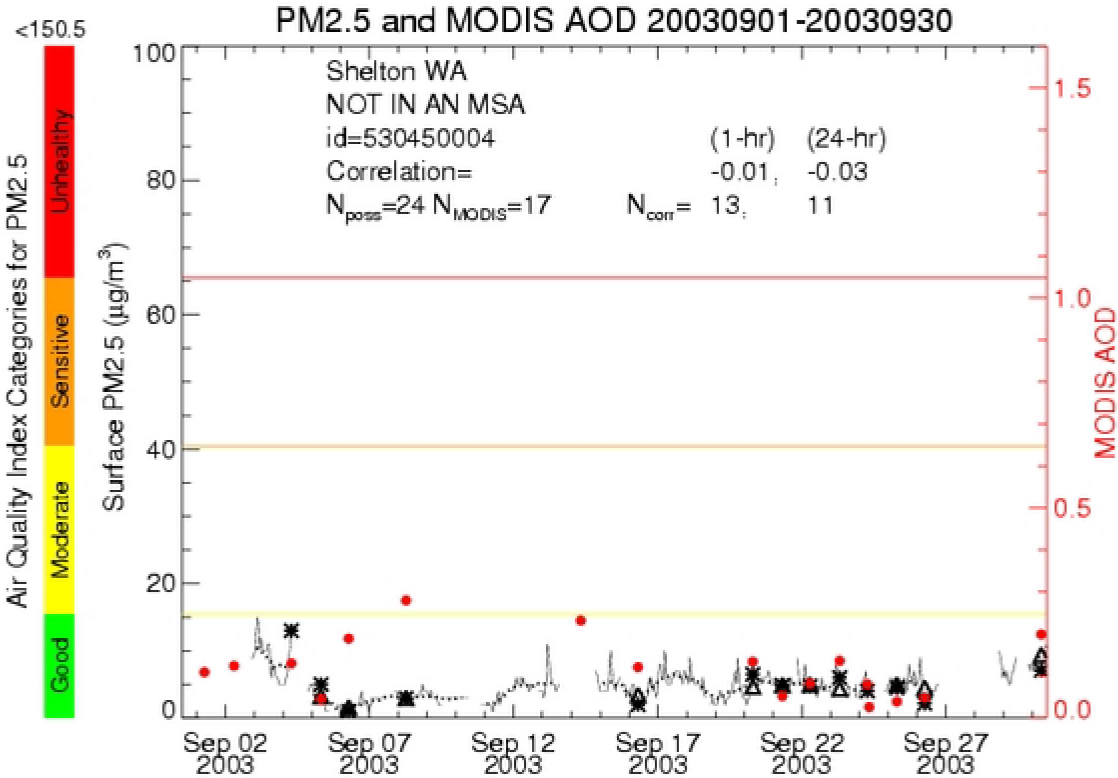

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Seattle Beacon Hill WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530330080 (1-hr) (24-hr)
Correlation= 0.35, 0.57
Nposs=26 NMODIS=17 Ncorr= 15, 15
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Seattle South Park WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530331011 (1-hr) (24-hr)
Correlation= 0.66, 0.74
N_poss=26 N_MODIS=16 N_corr= 14, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

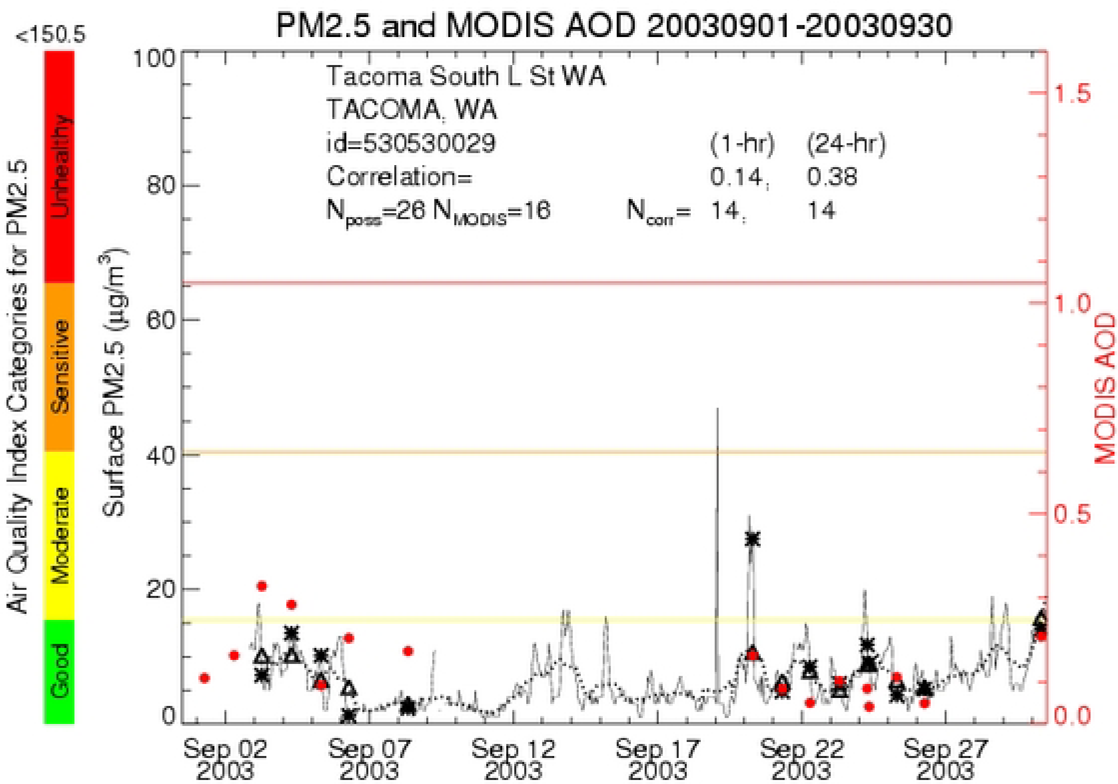

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Kent WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530332004 (1-hr) (24-hr)
Correlation= 0.06, 0.24
N_poss=26 N_MODIS=16 N_corr= 14, 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Silverdale WA
BREMERTON, WA
id=530350007
Correlation=
(1-hr) (24-hr)
0.46, 0.47
N_poss=26 N_MODIS=16
N_corr= 14, 14
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

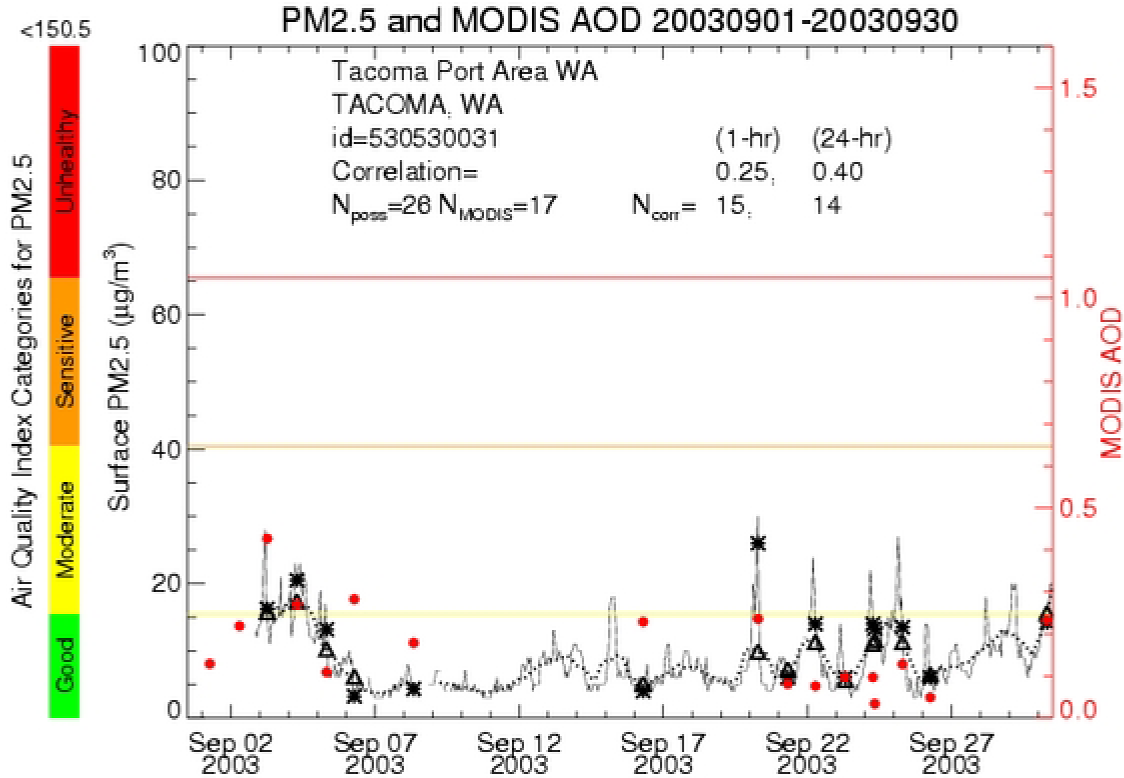

PM2.5 and MODIS AOD 20030901-20030930
Bremerton WA
BREMERTON, WA
id=530351005
Correlation=
(1-hr) (24-hr)
0.43, 0.61
N_poss=26 N_MODIS=16
N_corr= 10, 9
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

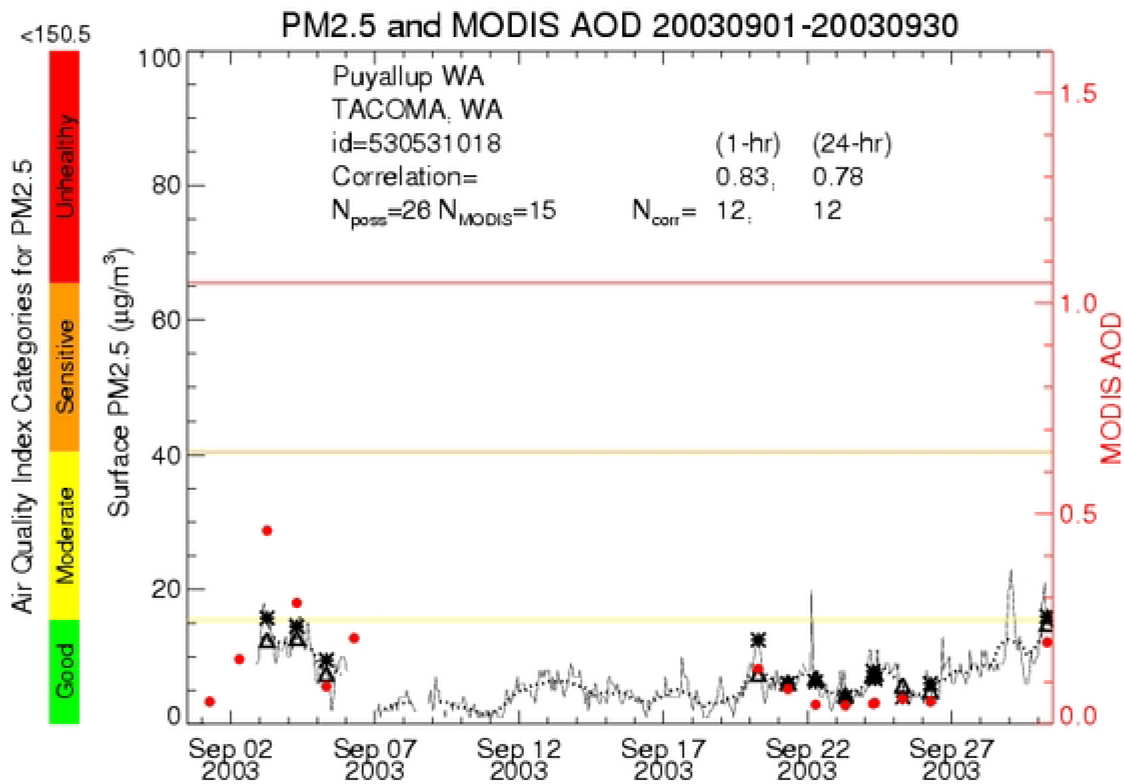


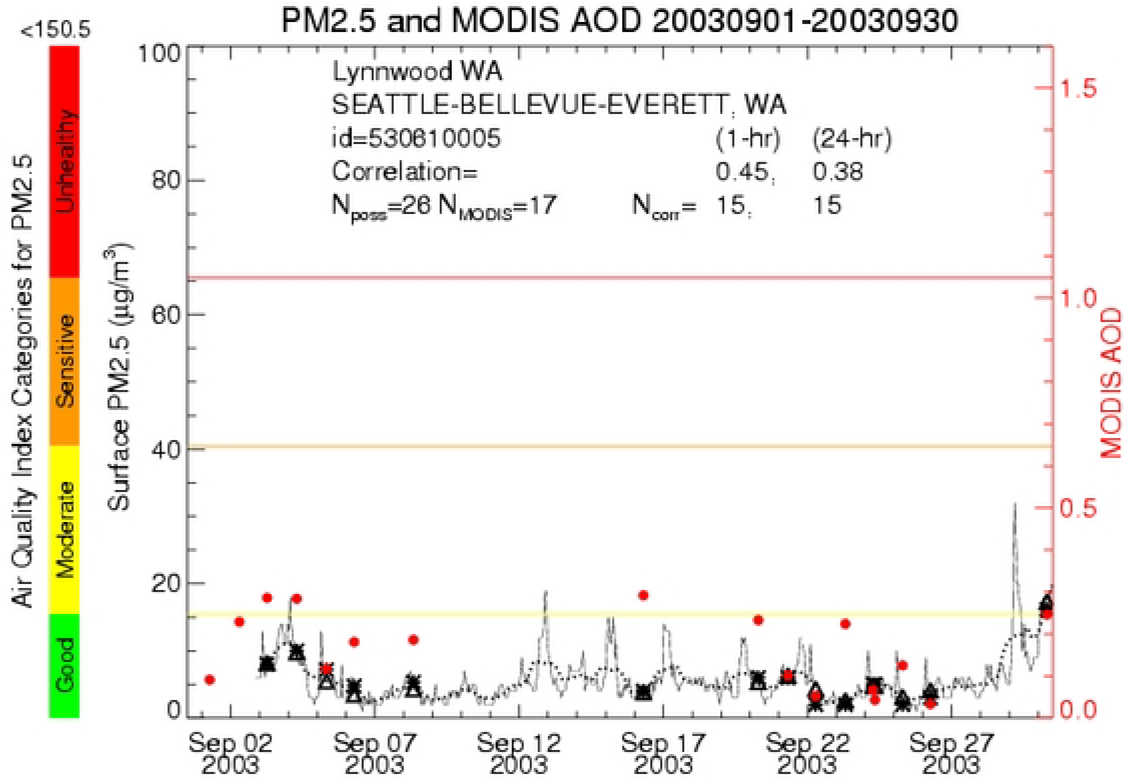
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Shelton WA
NOT IN AN MSA
id=530450004
(1-hr) (24-hr)
Correlation= -0.01; -0.03
N_poss=24 N_MODIS=17 N_corr= 13; 11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

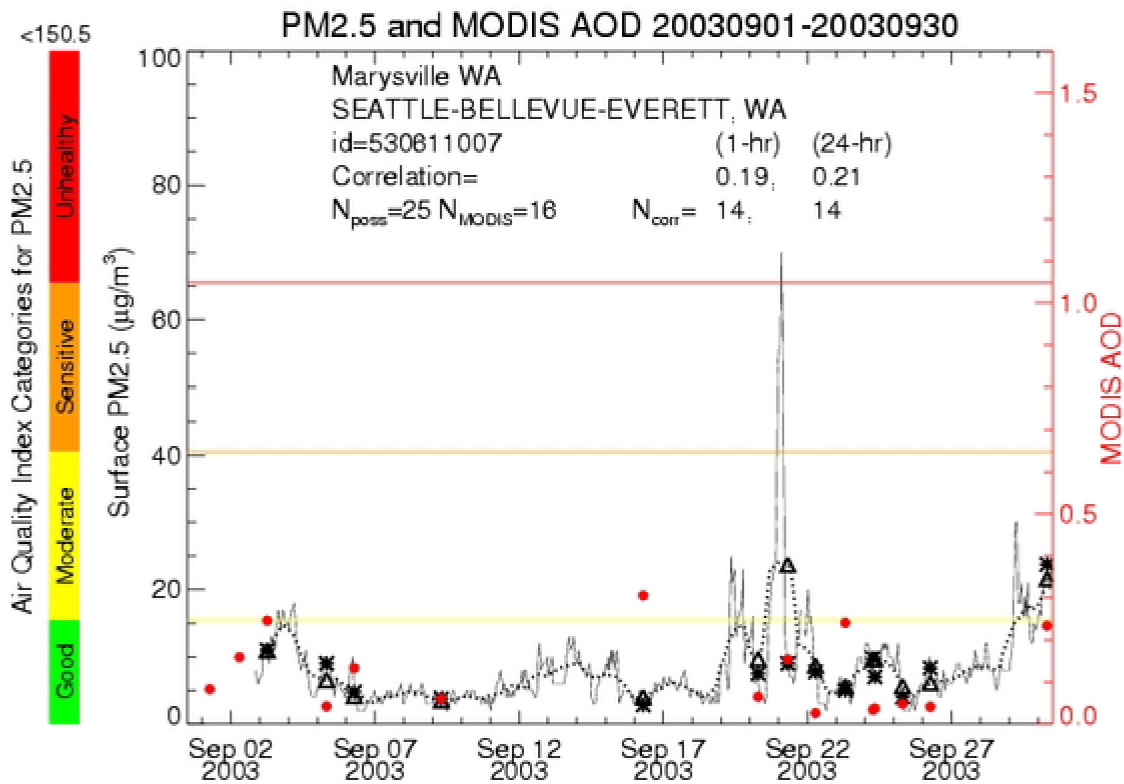


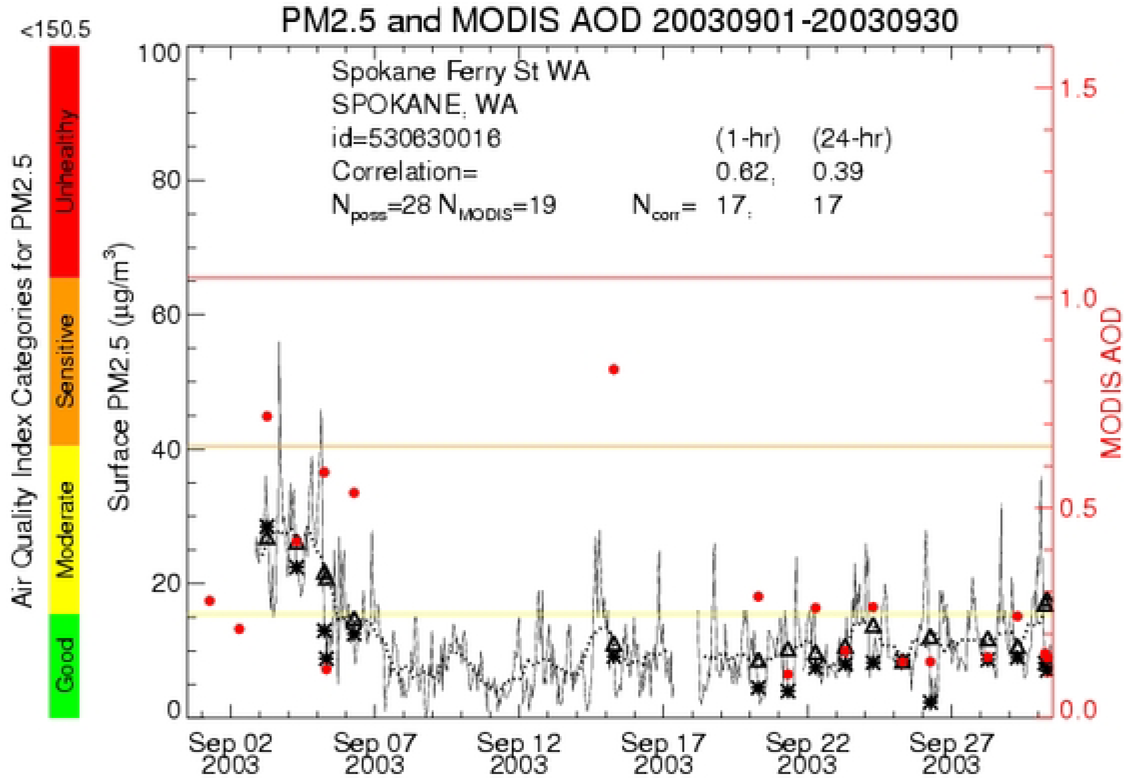
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Tacoma South L St WA
TACOMA, WA
id=530530029
(1-hr) (24-hr)
Correlation= 0.14; 0.38
N_poss=26 N_MODIS=16 N_corr= 14; 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Tacoma Port Area WA
TACOMA, WA
id=530530031
(1-hr) (24-hr)
Correlation= 0.25, 0.40
N_{poss}=26 N_{MODIS}=17 N_{corr}= 15, 14
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
0
20
40
60
80
100
0.0
0.5
1.0
1.5
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

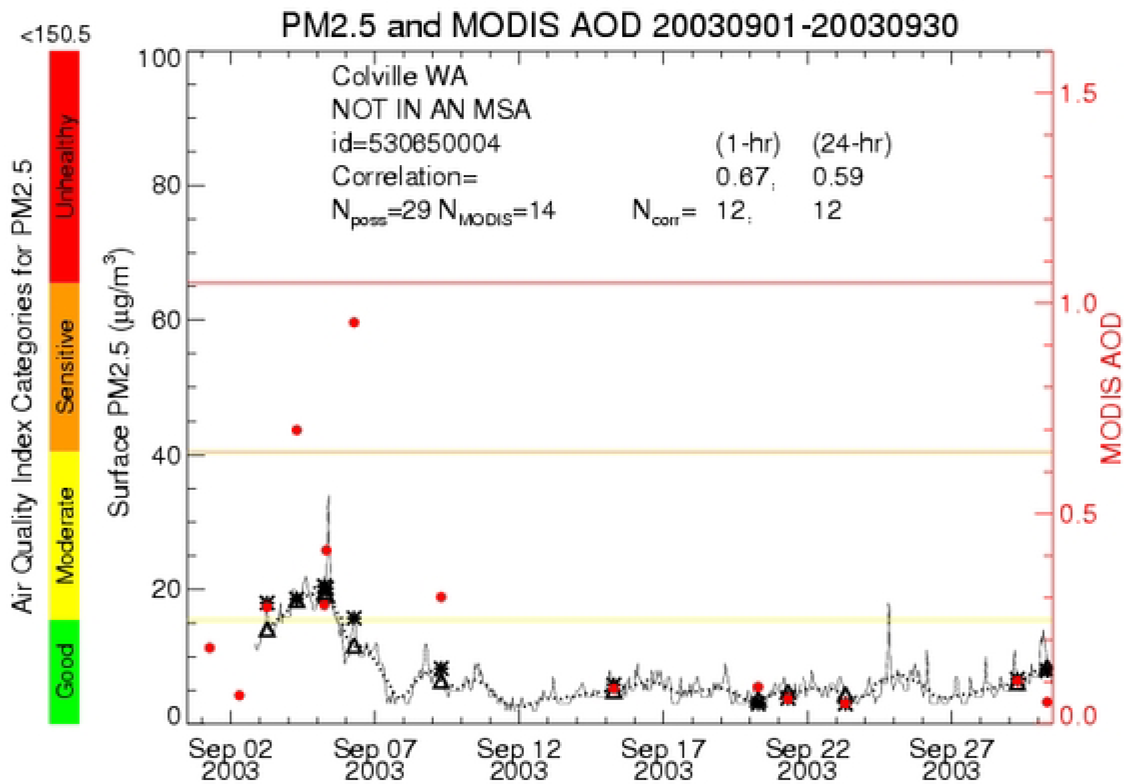

PM2.5 and MODIS AOD 20030901-20030930
Puyallup WA
TACOMA, WA
id=530531018
(1-hr) (24-hr)
Correlation= 0.83, 0.78
N_{poss}=26 N_{MODIS}=15 N_{corr}= 12, 12
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (μg/m³)
MODIS AOD
0
20
40
60
80
100
0.0
0.5
1.0
1.5
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Lynnwood WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530610005 (1-hr) (24-hr)
Correlation= 0.45, 0.38
Nposs=26 NMODIS=17 Ncorr= 15, 15
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

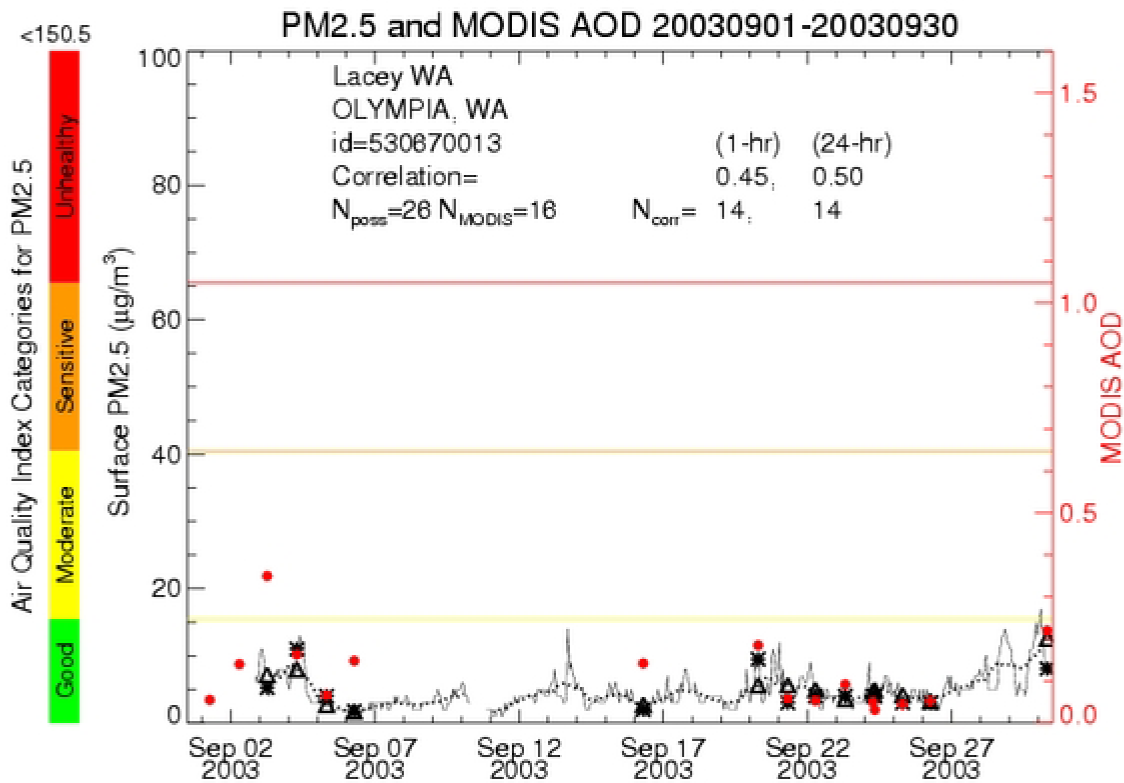

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Marysville WA
SEATTLE-BELLEVUE-EVERETT, WA
id=530611007 (1-hr) (24-hr)
Correlation= 0.19, 0.21
Nposs=25 NMODIS=16 Ncorr= 14, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

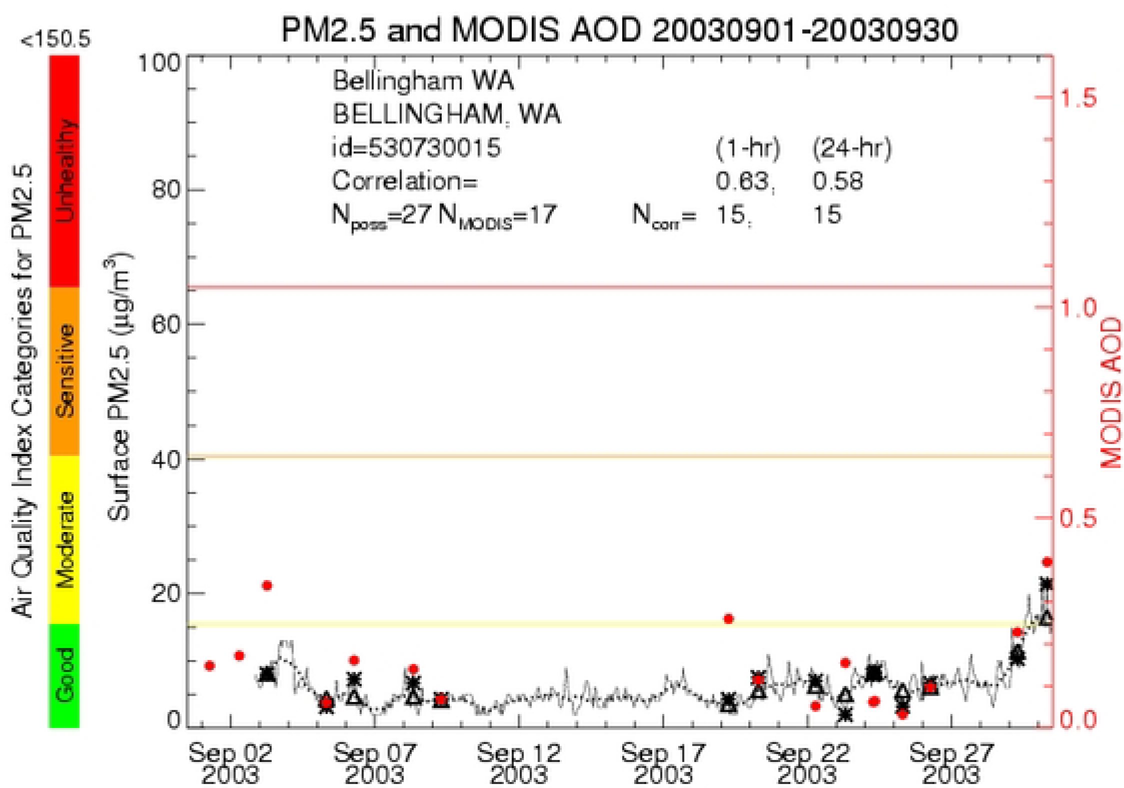


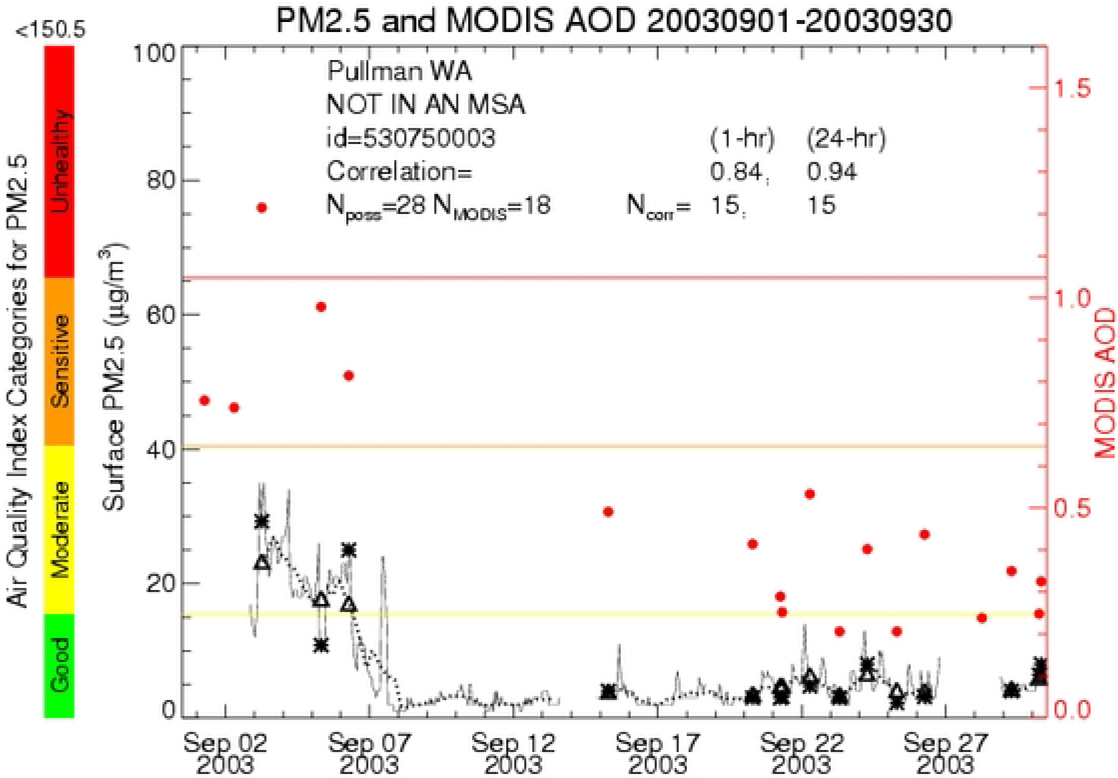
PM2.5 and MODIS AOD 20030901-20030930
Spokane Ferry St WA
SPOKANE, WA
id=530630016
(1-hr) (24-hr)
Correlation= 0.62, 0.39
N_{poss}=28 N_{MODIS}=19 N_{corr}= 17, 17
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



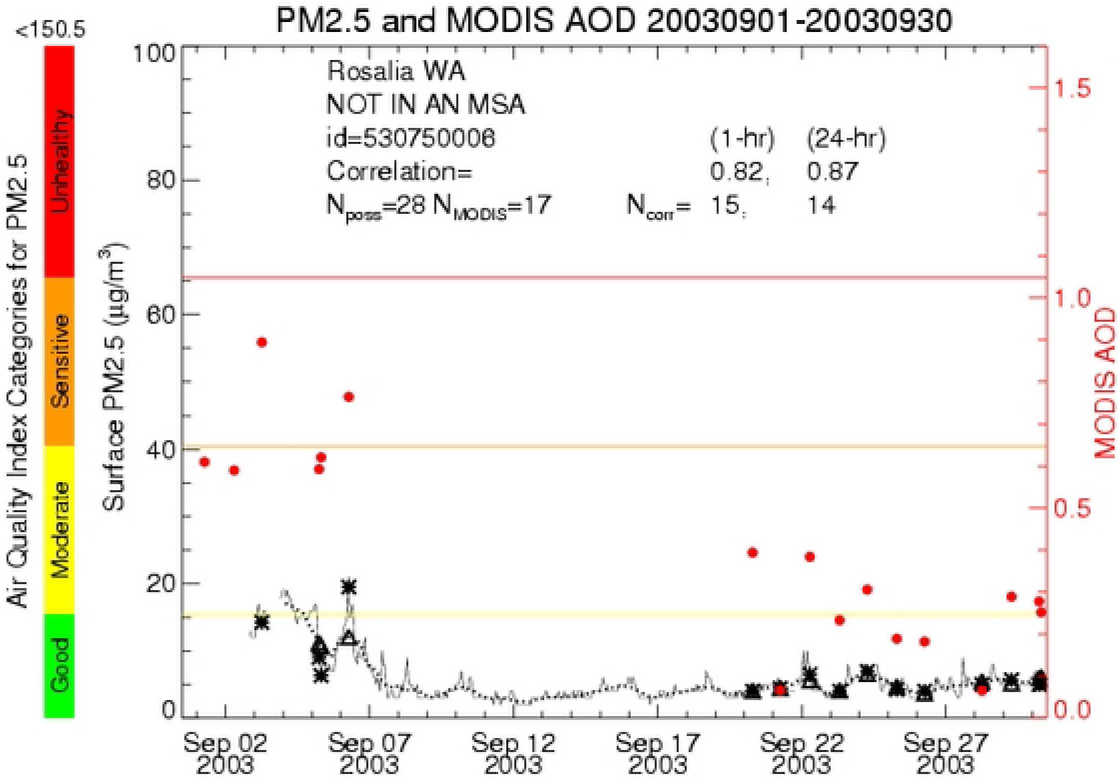
PM2.5 and MODIS AOD 20030901-20030930
Colville WA
NOT IN AN MSA
id=530650004
(1-hr) (24-hr)
Correlation= 0.67, 0.59
N_{poss}=29 N_{MODIS}=14 N_{corr}= 12, 12
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Lacey WA
OLYMPIA, WA
id=530670013
(1-hr) (24-hr)
Correlation= 0.45, 0.50
N_poss=26 N_MODIS=16 N_corr= 14, 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Bellingham WA
BELLINGHAM, WA
id=530730015
(1-hr) (24-hr)
Correlation= 0.63, 0.58
N_poss=27 N_MODIS=17 N_corr= 15, 15
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

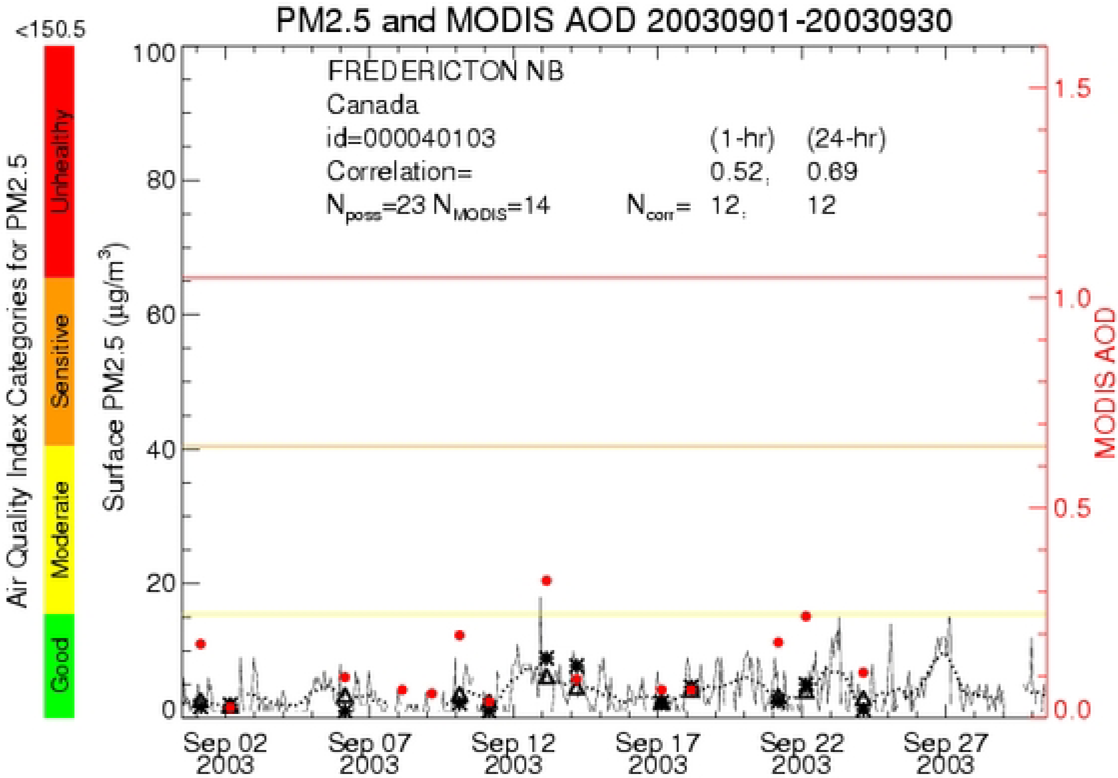


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Pullman WA
NOT IN AN MSA
id=530750003
Correlation=
N_{poss}=28 N_{MODIS}=18
N_{corr}=
(1-hr)
0.84;
15;
(24-hr)
0.94
15
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

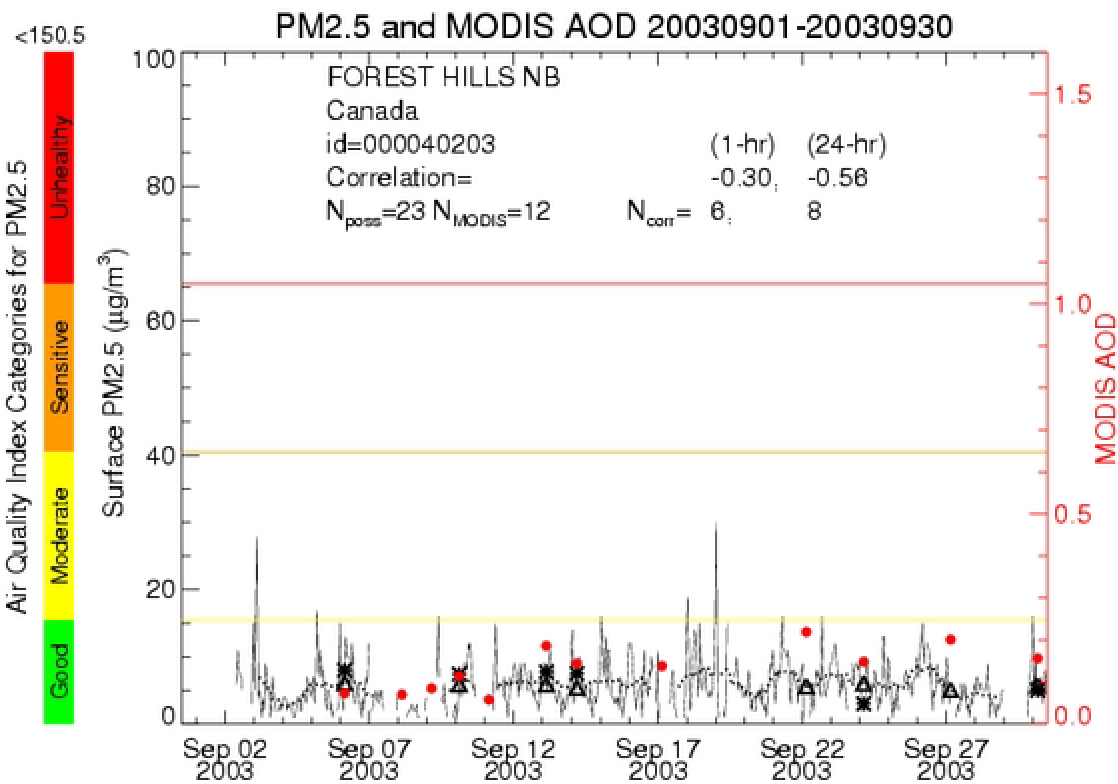


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Rosalia WA
NOT IN AN MSA
id=530750006
Correlation=
N_{poss}=28 N_{MODIS}=17
N_{corr}=
(1-hr)
0.82;
15;
(24-hr)
0.87
14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

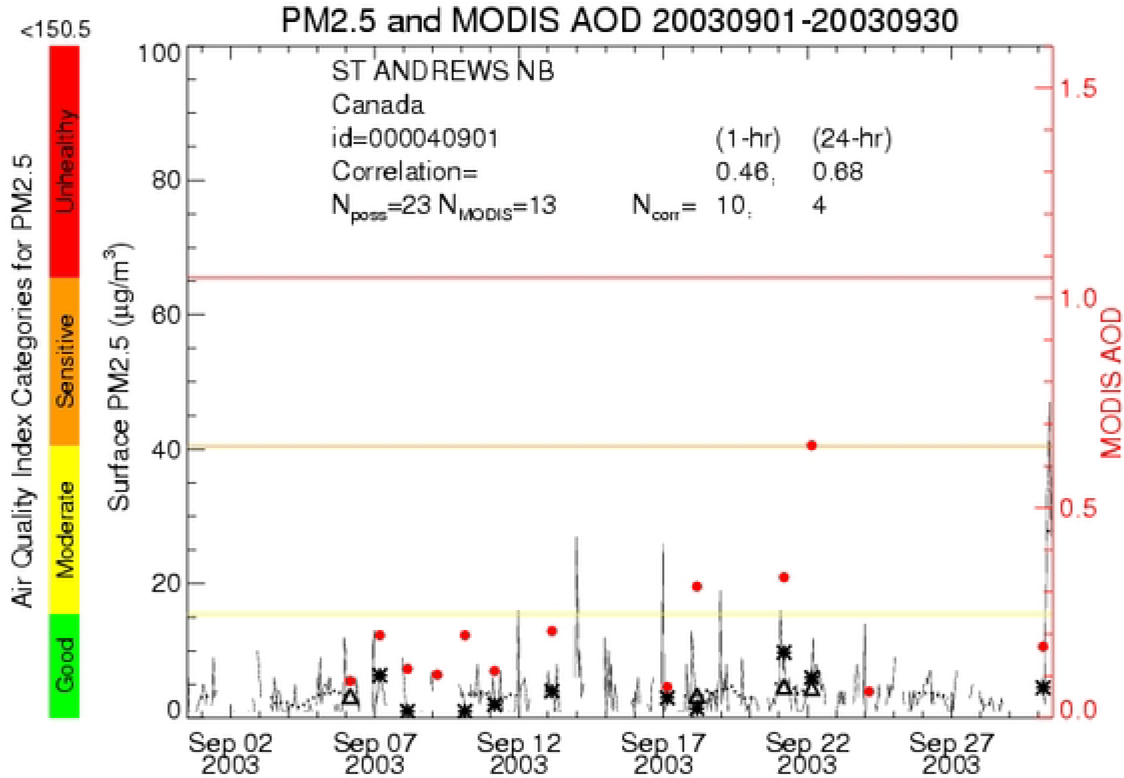
Canada

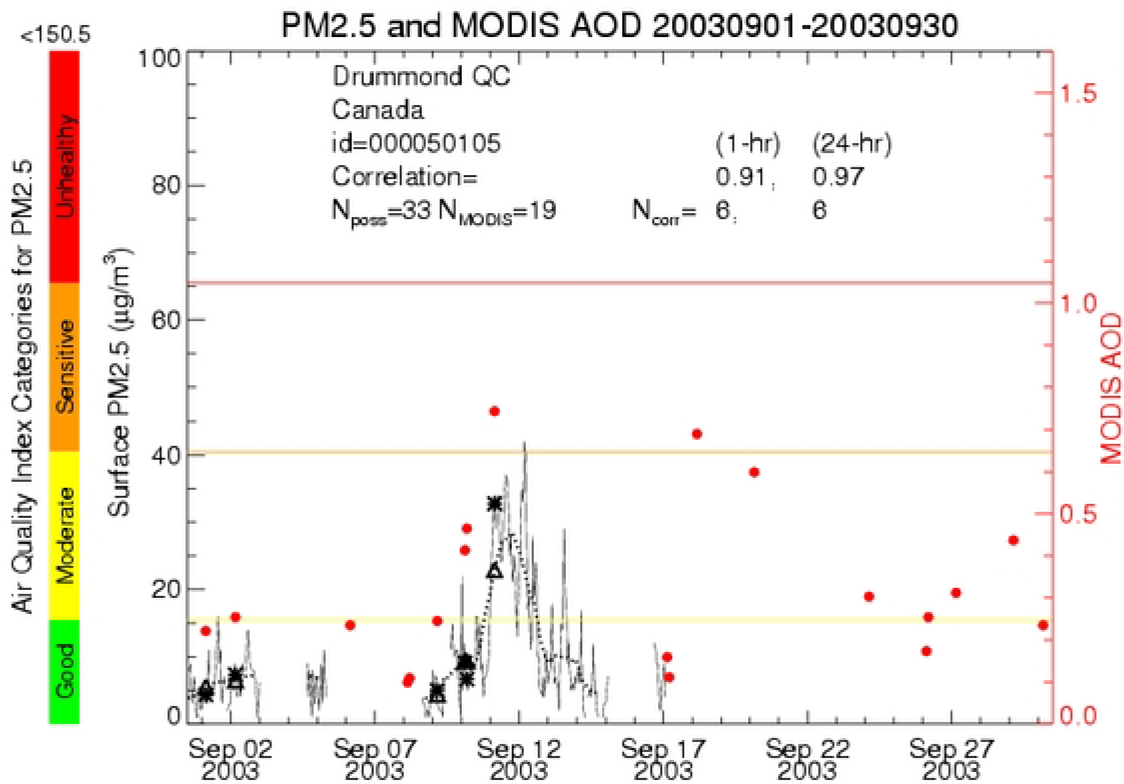


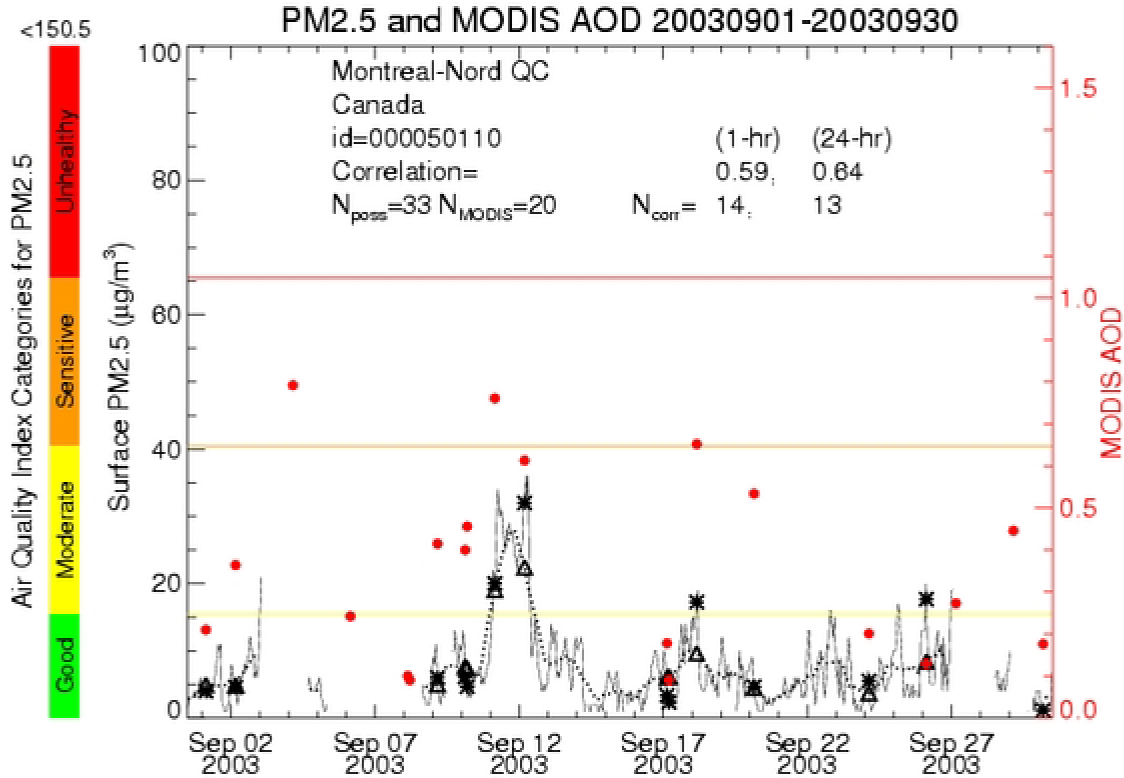
PM2.5 and MODIS AOD 20030901-20030930
<150.5
FREDERICTON NB
Canada
id=000040103
(1-hr) (24-hr)
Correlation= 0.52; 0.69
N_poss=23 N_MODIS=14 N_corr= 12; 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

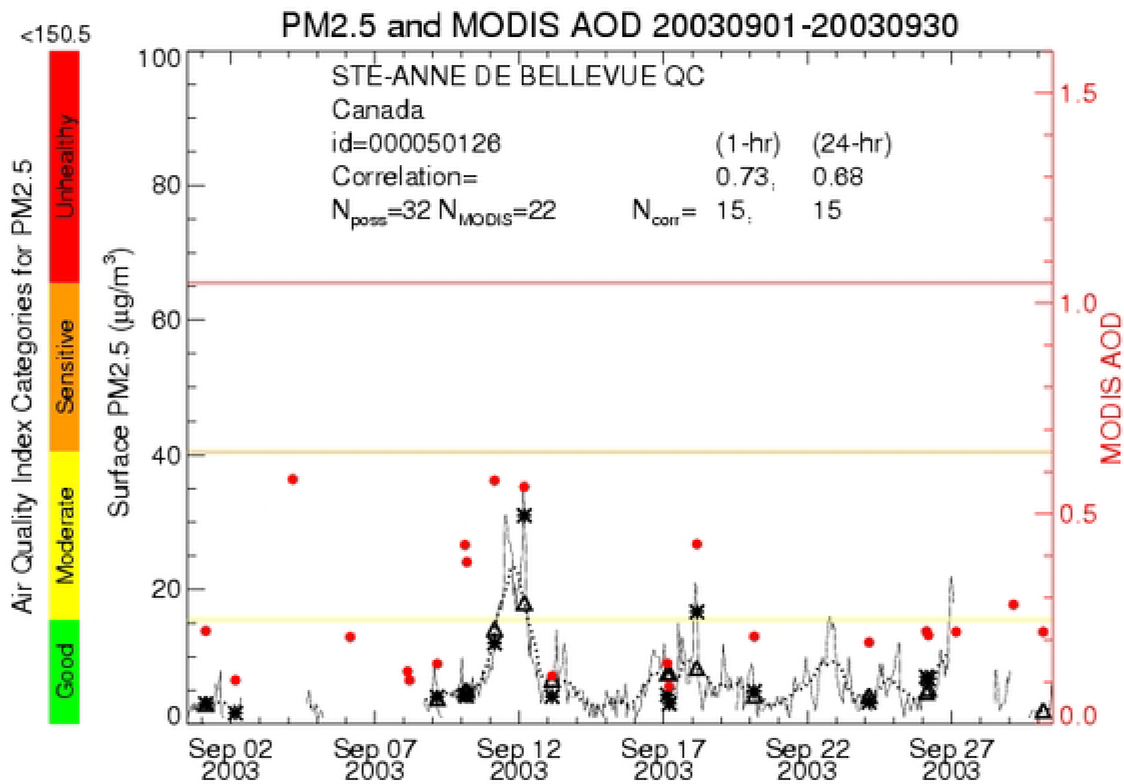


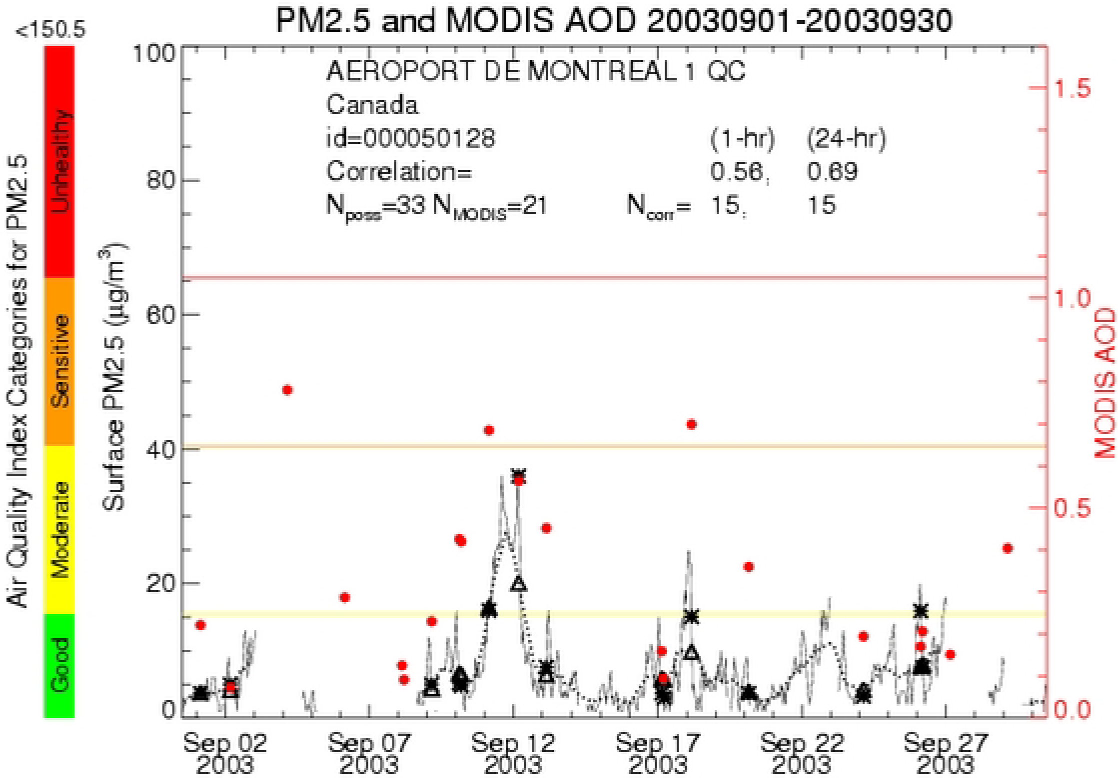
PM2.5 and MODIS AOD 20030901-20030930
<150.5
FOREST HILLS NB
Canada
id=000040203
(1-hr) (24-hr)
Correlation= -0.30; -0.56
N_poss=23 N_MODIS=12 N_corr= 6; 8
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
ST ANDREWS NB
Canada
id=000040901
(1-hr) (24-hr)
Correlation= 0.46; 0.68
N_{poss}=23 N_{MODIS}=13 N_{corr}= 10; 4
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

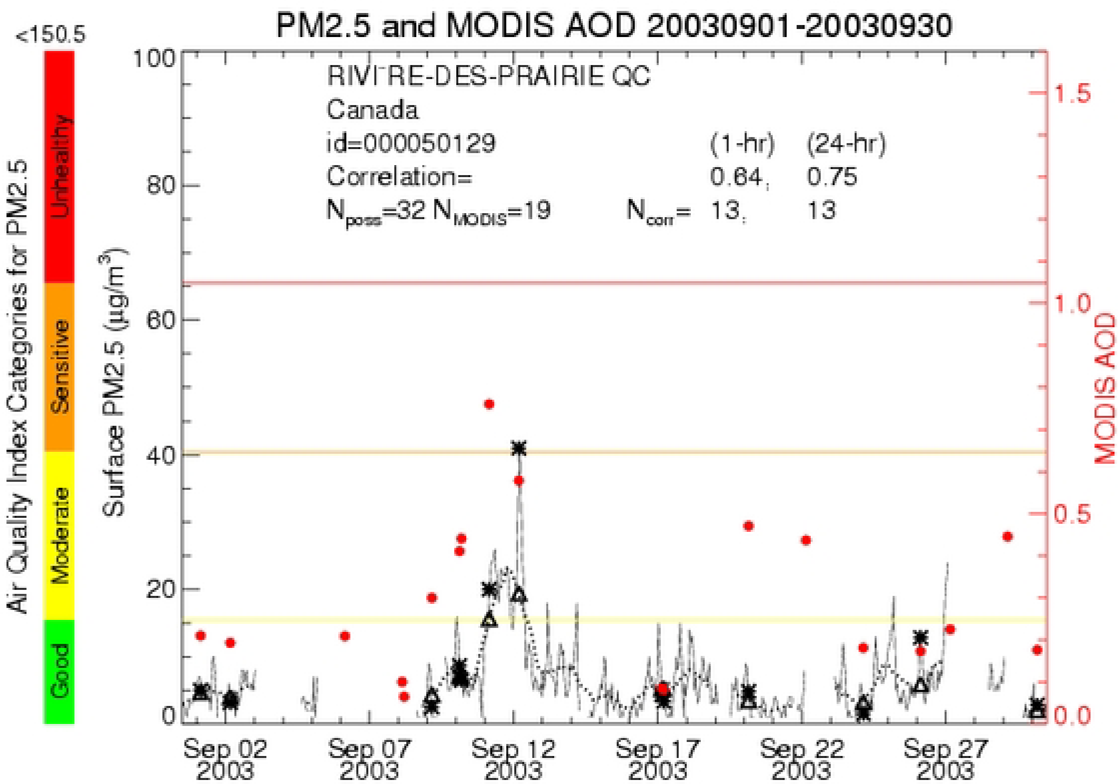

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Drummond QC
Canada
id=000050105
(1-hr) (24-hr)
Correlation= 0.91; 0.97
N_{poss}=33 N_{MODIS}=19 N_{corr}= 6; 6
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Montreal-Nord QC
Canada
id=000050110
(1-hr) (24-hr)
Correlation= 0.59; 0.64
Nposs=33 NMODIS=20 Ncorr= 14; 13
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

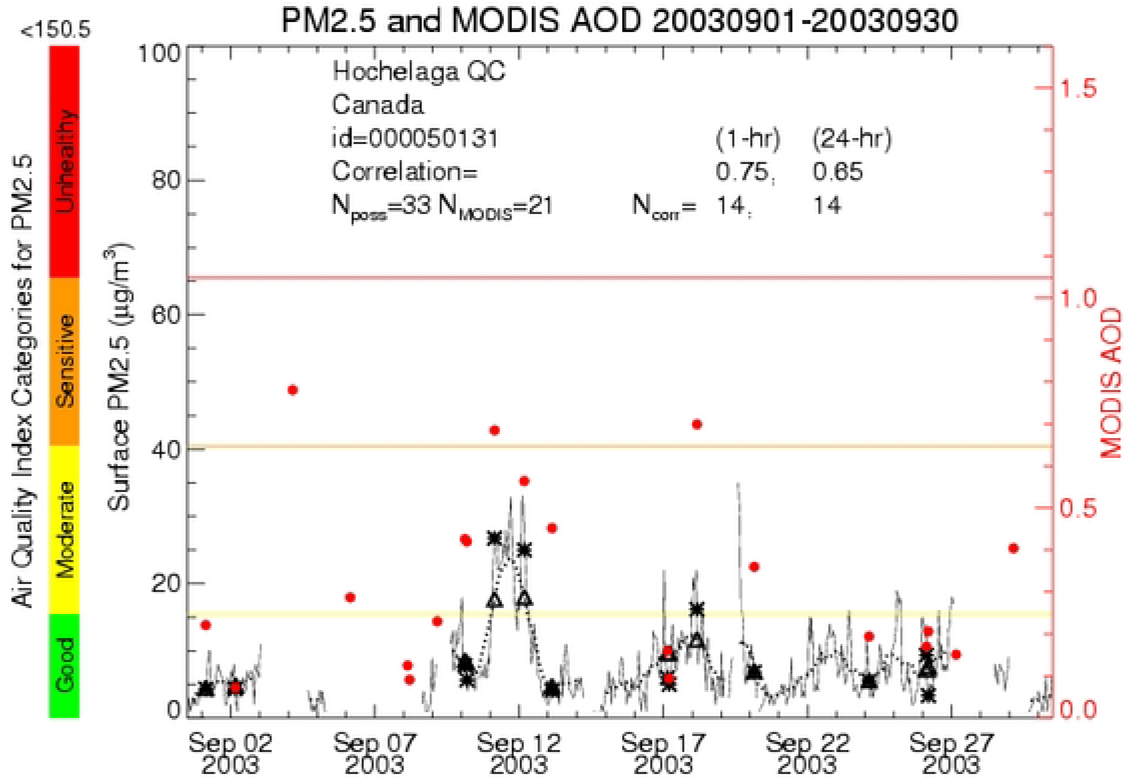

PM2.5 and MODIS AOD 20030901-20030930
STE-ANNE DE BELLEVUE QC
Canada
id=000050126
(1-hr) (24-hr)
Correlation= 0.73; 0.68
Nposs=32 NMODIS=22 Ncorr= 15; 15
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

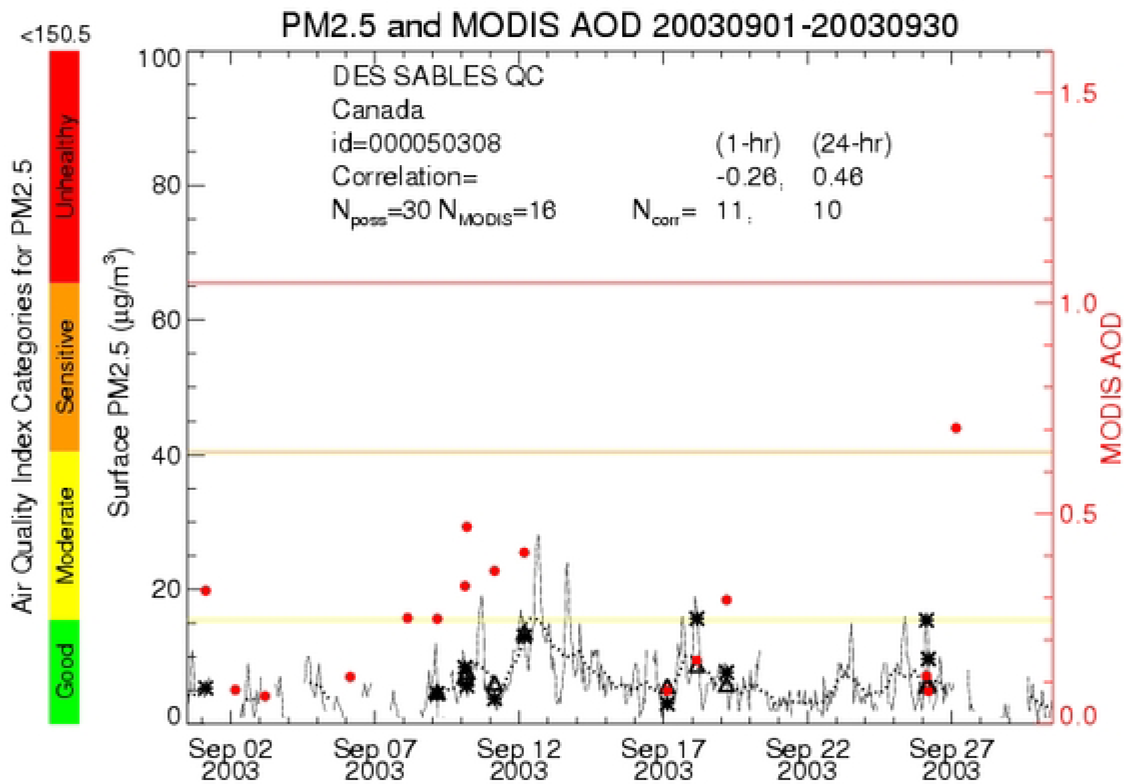


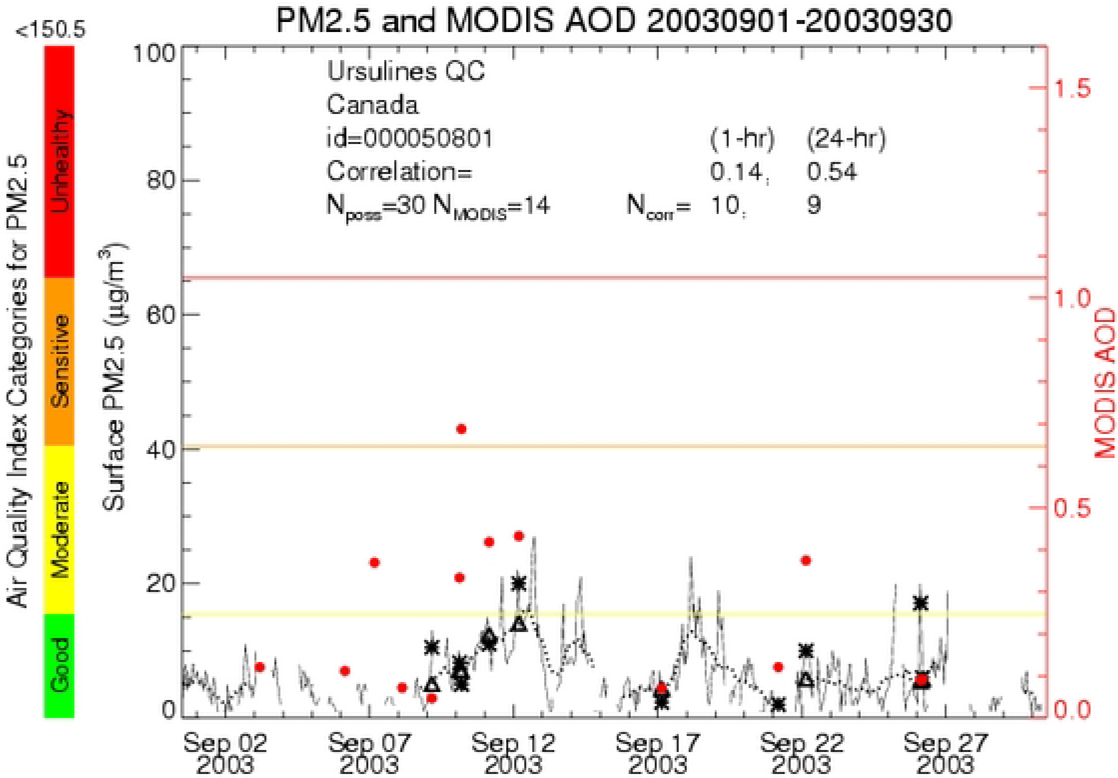
PM2.5 and MODIS AOD 20030901-20030930
<150.5
AEROPORT DE MONTREAL 1 QC
Canada
id=000050128
(1-hr) (24-hr)
Correlation= 0.56; 0.69
N_poss=33 N_MODIS=21 N_corr= 15; 15
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

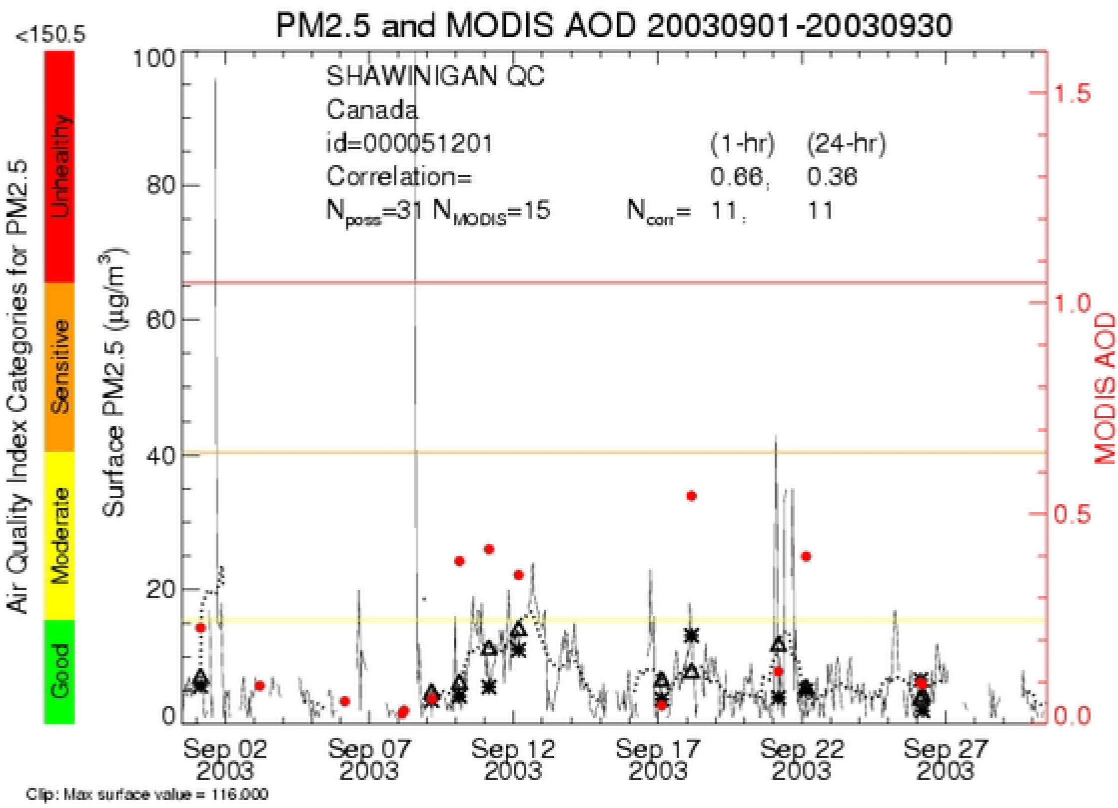


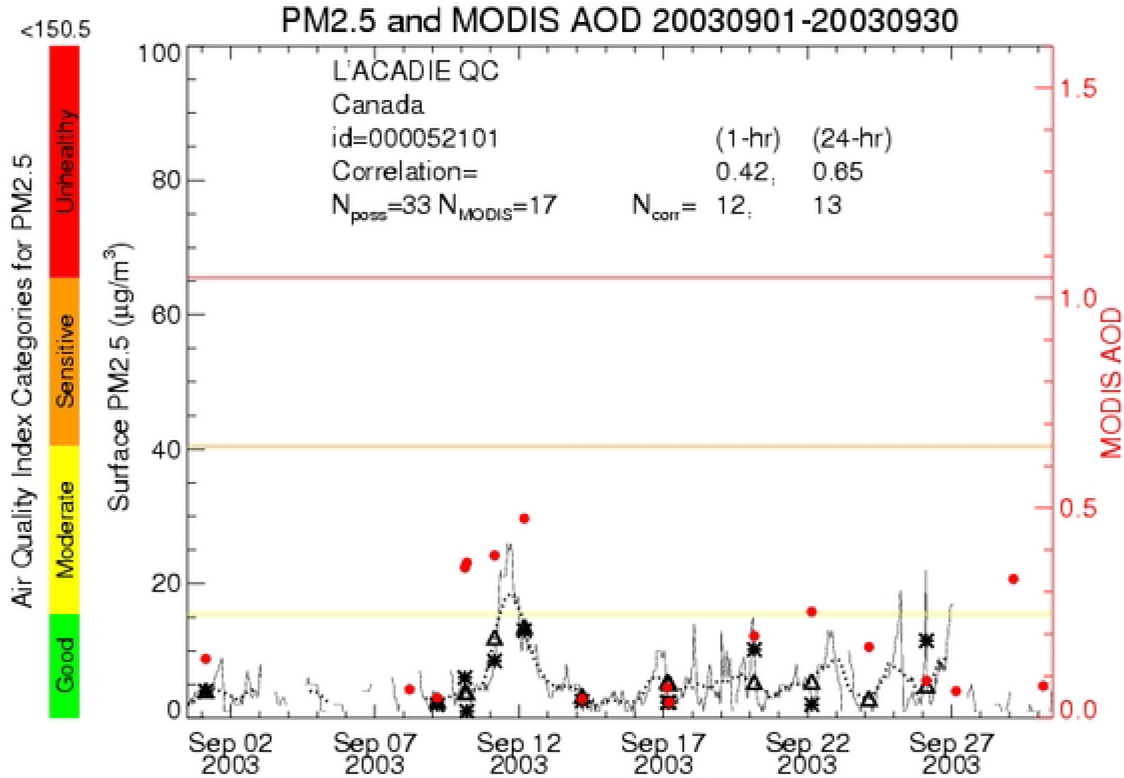
PM2.5 and MODIS AOD 20030901-20030930
<150.5
RIVI¯RE-DES-PRAIRIE QC
Canada
id=000050129
(1-hr) (24-hr)
Correlation= 0.64; 0.75
N_poss=32 N_MODIS=19 N_corr= 13; 13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

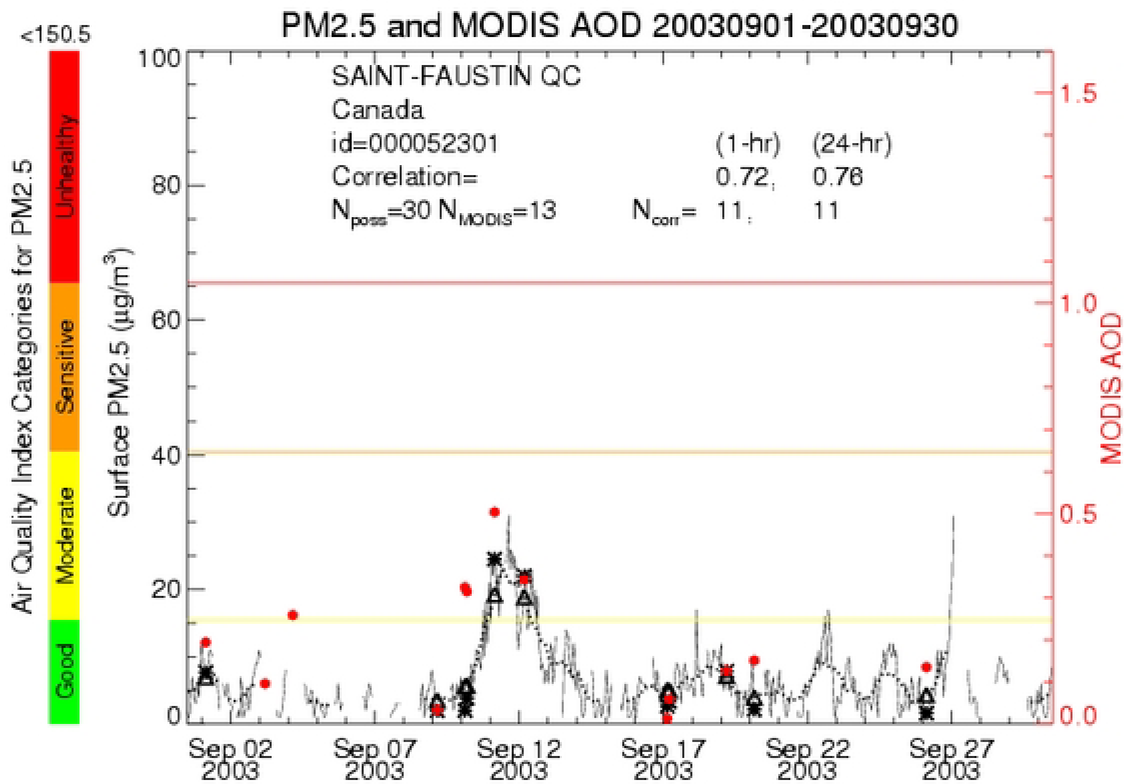

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Hochelaga QC
Canada
id=000050131
Correlation=
(1-hr) (24-hr)
0.75, 0.65
Nposs=33 NMODIS=21 Ncorr= 14, 14
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

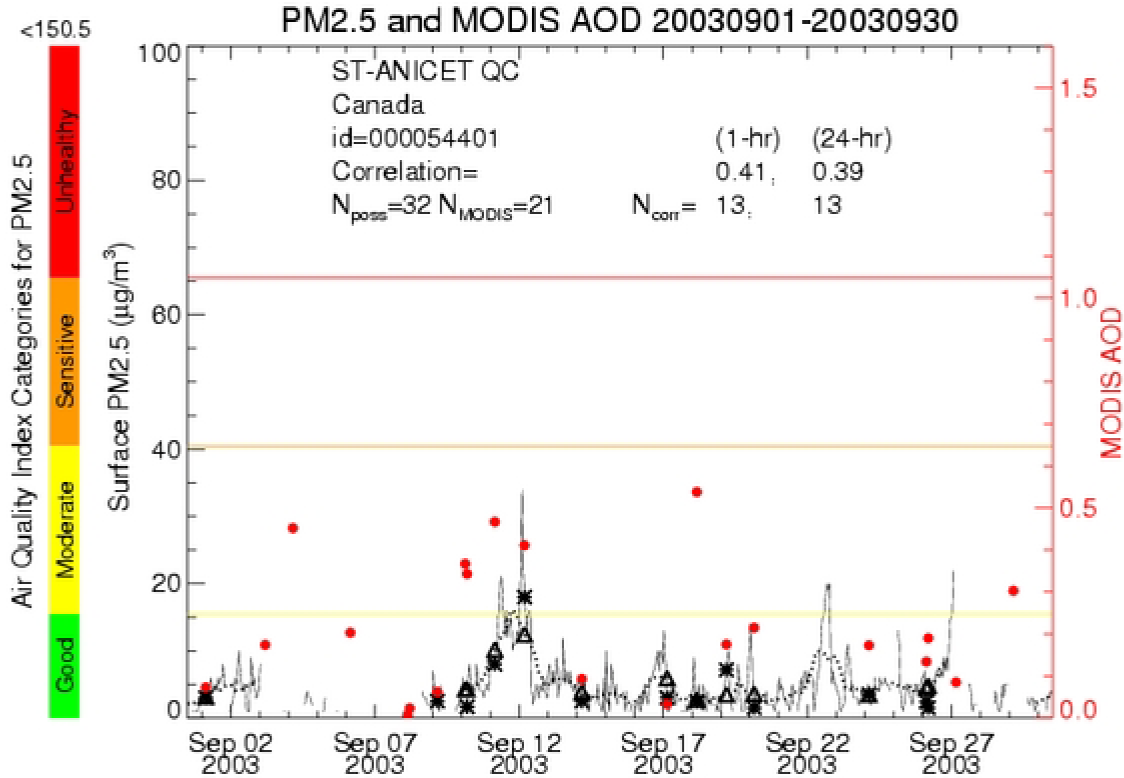

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
DES SABLES QC
Canada
id=000050308
Correlation=
(1-hr) (24-hr)
-0.26, 0.46
Nposs=30 NMODIS=16 Ncorr= 11, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

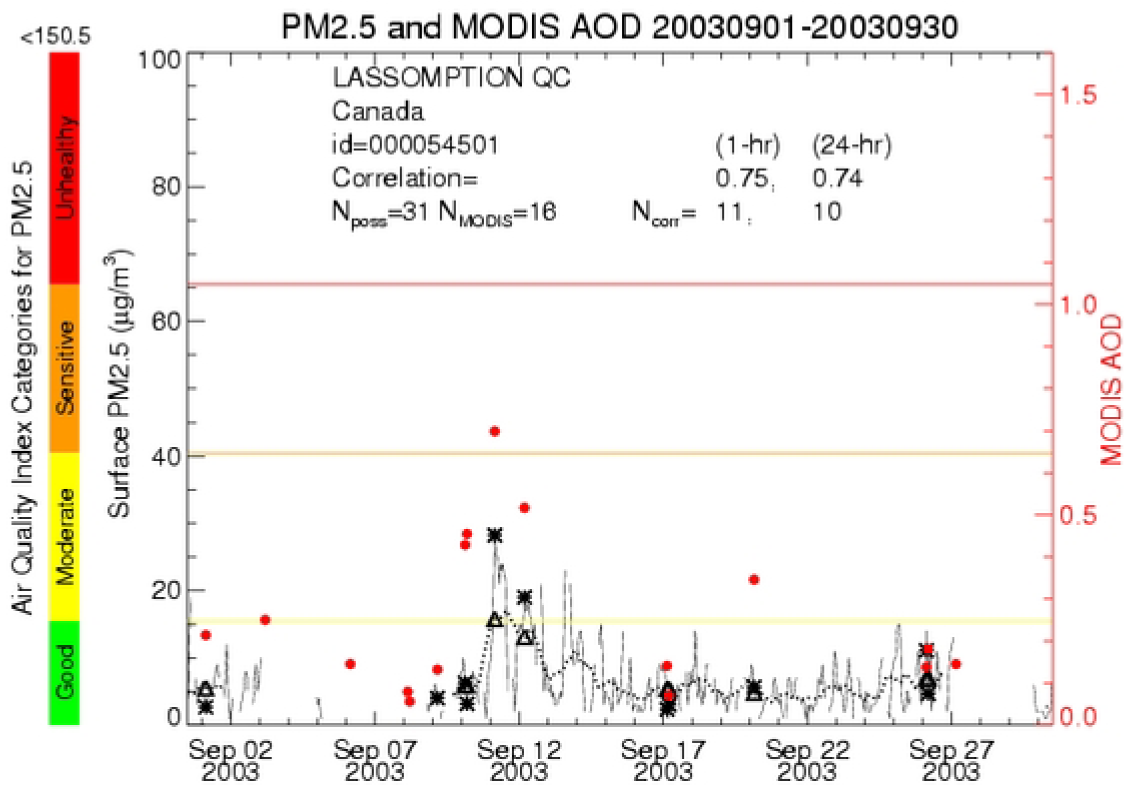

PM2.5 and MODIS AOD 20030901-20030930
Ursulines QC
Canada
id=000050801
Correlation=
(1-hr) (24-hr)
0.14; 0.54
N_poss=30 N_MODIS=14
N_corr= 10; 9
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

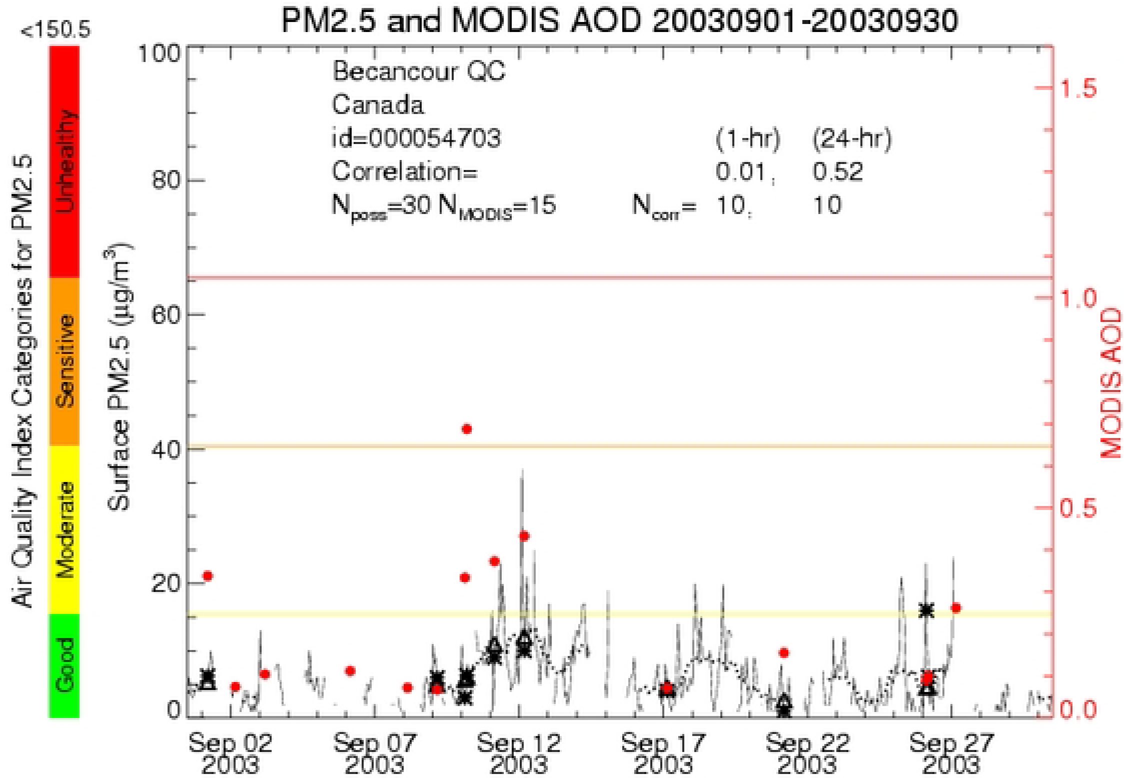

PM2.5 and MODIS AOD 20030901-20030930
SHAWINIGAN QC
Canada
id=000051201
Correlation=
(1-hr) (24-hr)
0.66; 0.36
N_poss=31 N_MODIS=15
N_corr= 11; 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003
Clip: Max surface value = 116.000

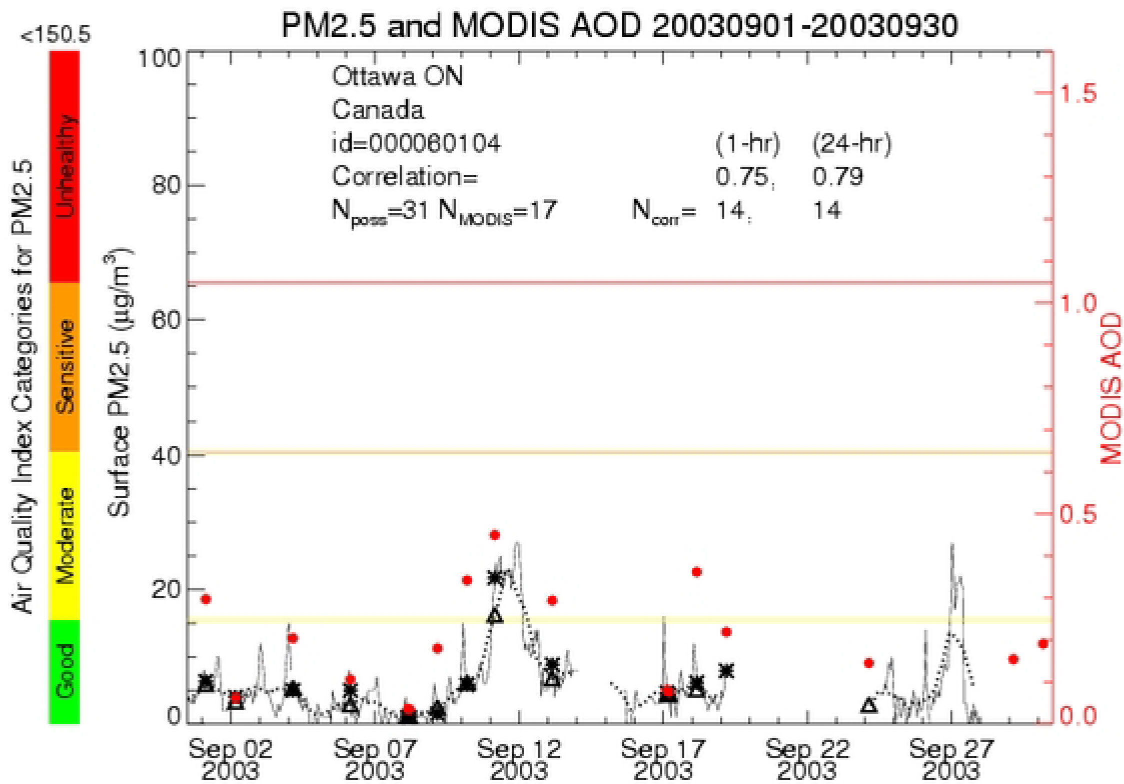

PM2.5 and MODIS AOD 20030901-20030930
L'ACADIE QC
Canada
id=000052101
(1-hr) (24-hr)
Correlation= 0.42; 0.65
N_{poss}=33 N_{MODIS}=17 N_{corr}= 12; 13
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

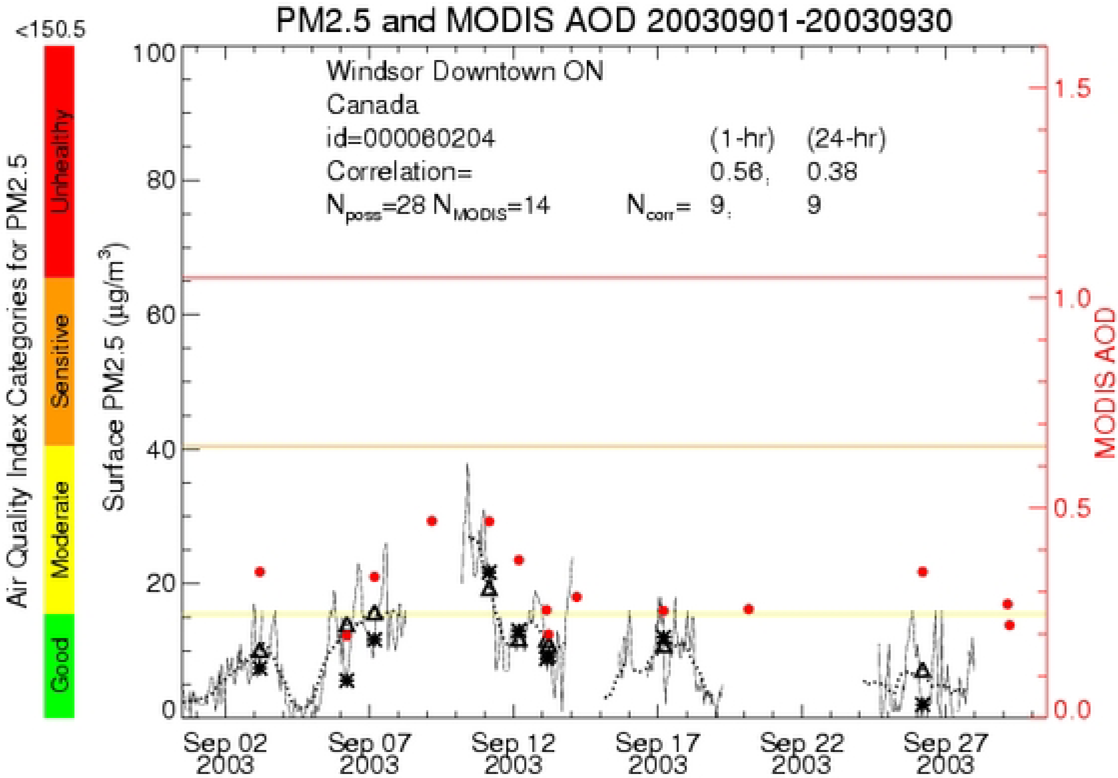

PM2.5 and MODIS AOD 20030901-20030930
SAINT-FAUSTIN QC
Canada
id=000052301
(1-hr) (24-hr)
Correlation= 0.72; 0.76
N_{poss}=30 N_{MODIS}=13 N_{corr}= 11; 11
<150.5
Unhealthy
Sensitive
Moderate
Good
Air Quality Index Categories for PM2.5
Surface PM2.5 (µg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

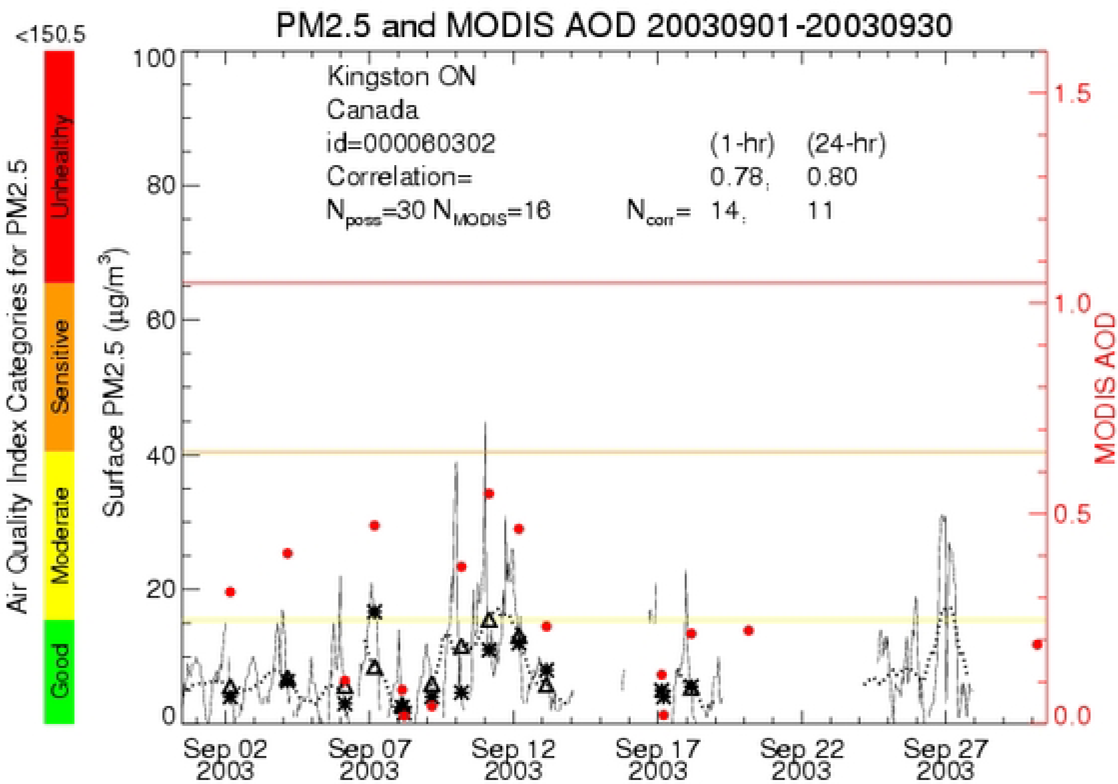

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
ST-ANICET QC
Canada
id=000054401
(1-hr) (24-hr)
Correlation= 0.41, 0.39
Nposs=32 NMODIS=21 Ncorr= 13, 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

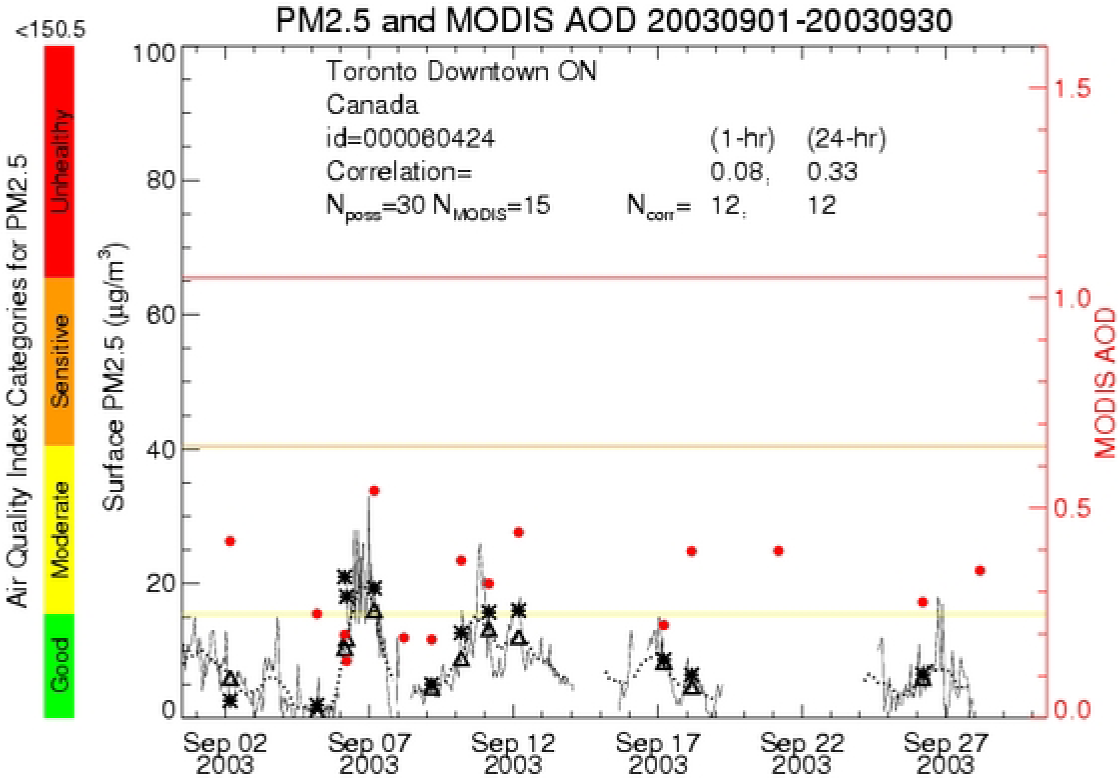

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
LASSOMPTION QC
Canada
id=000054501
(1-hr) (24-hr)
Correlation= 0.75, 0.74
Nposs=31 NMODIS=16 Ncorr= 11, 10
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Becancour QC
Canada
id=000054703
Correlation=
(1-hr) (24-hr)
0.01; 0.52
N_poss=30 N_MODIS=15
N_corr= 10; 10
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

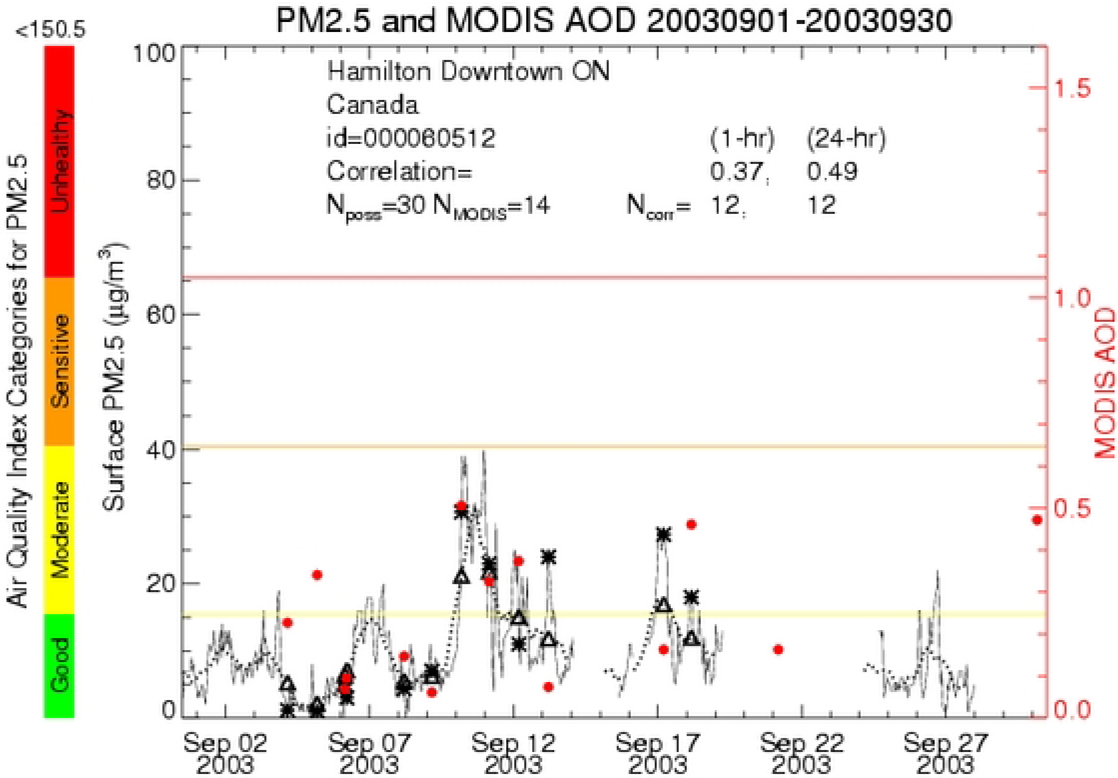

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Ottawa ON
Canada
id=000060104
Correlation=
(1-hr) (24-hr)
0.75; 0.79
N_poss=31 N_MODIS=17
N_corr= 14; 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Windsor Downtown ON
Canada
id=000060204
(1-hr) (24-hr)
Correlation= 0.56; 0.38
N_{poss}=28 N_{MODIS}=14 N_{corr}= 9; 9
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

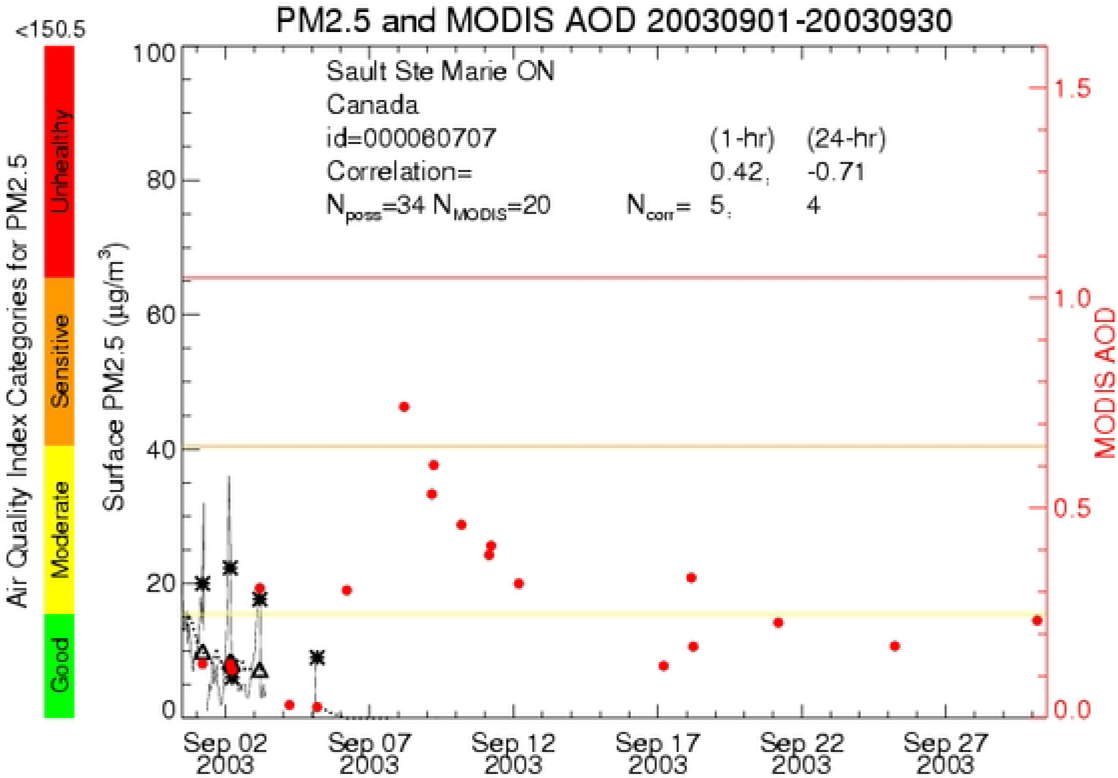

PM2.5 and MODIS AOD 20030901-20030930
Kingston ON
Canada
id=000060302
(1-hr) (24-hr)
Correlation= 0.78; 0.80
N_{poss}=30 N_{MODIS}=16 N_{corr}= 14; 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



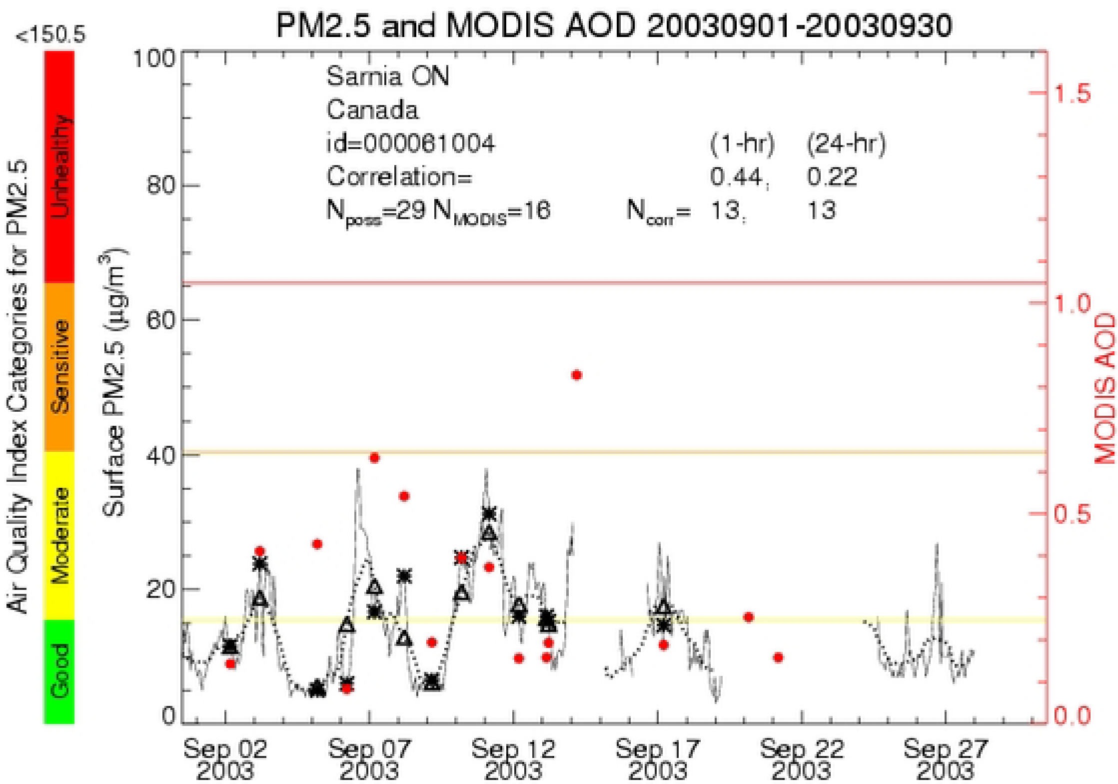
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Toronto Downtown ON
Canada
id=000060424
(1-hr) (24-hr)
Correlation= 0.08, 0.33
N_poss=30 N_MODIS=15 N_corr= 12, 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



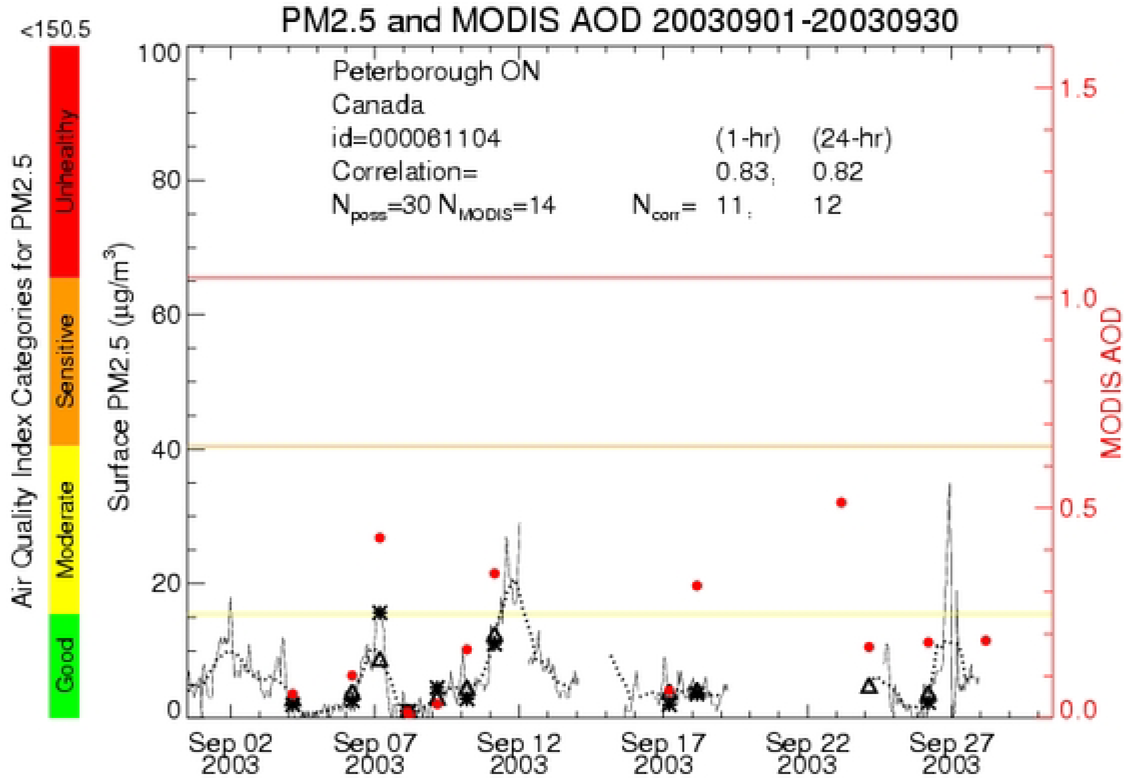
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Hamilton Downtown ON
Canada
id=000060512
(1-hr) (24-hr)
Correlation= 0.37, 0.49
N_poss=30 N_MODIS=14 N_corr= 12, 12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



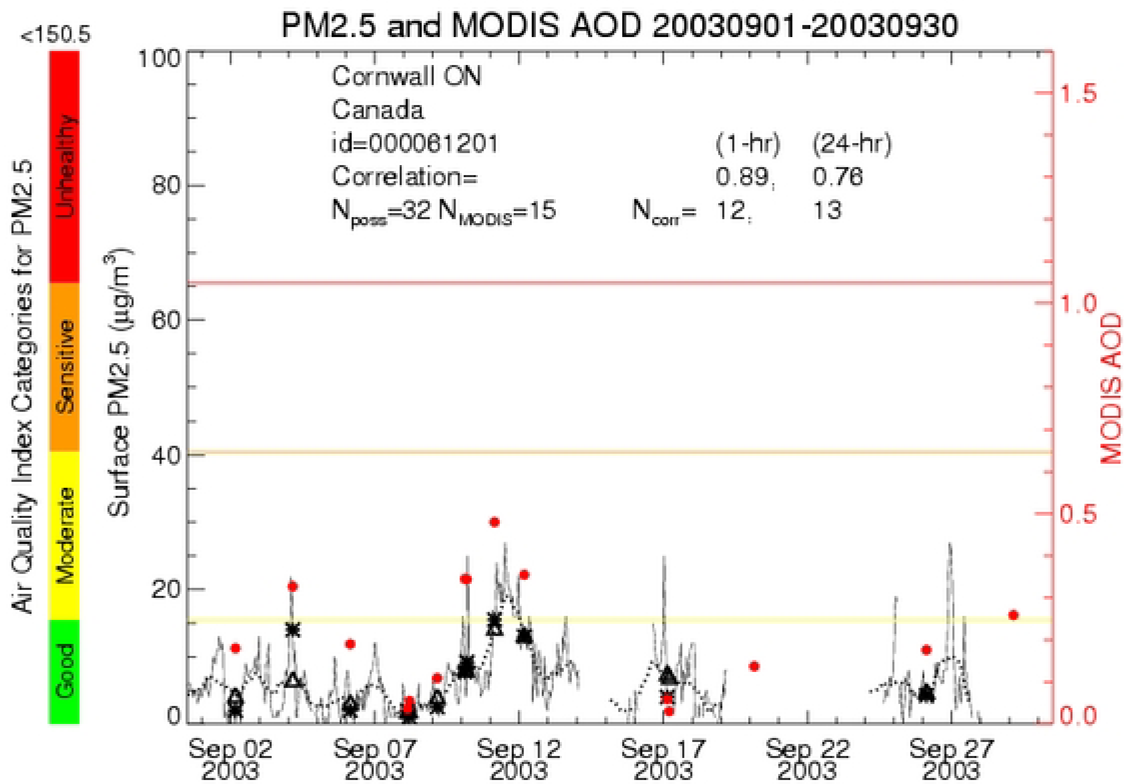
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sault Ste Marie ON
Canada
id=000060707
Correlation=
(1-hr) (24-hr)
0.42; -0.71
N_poss=34 N_MODIS=20
N_corr= 5; 4
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



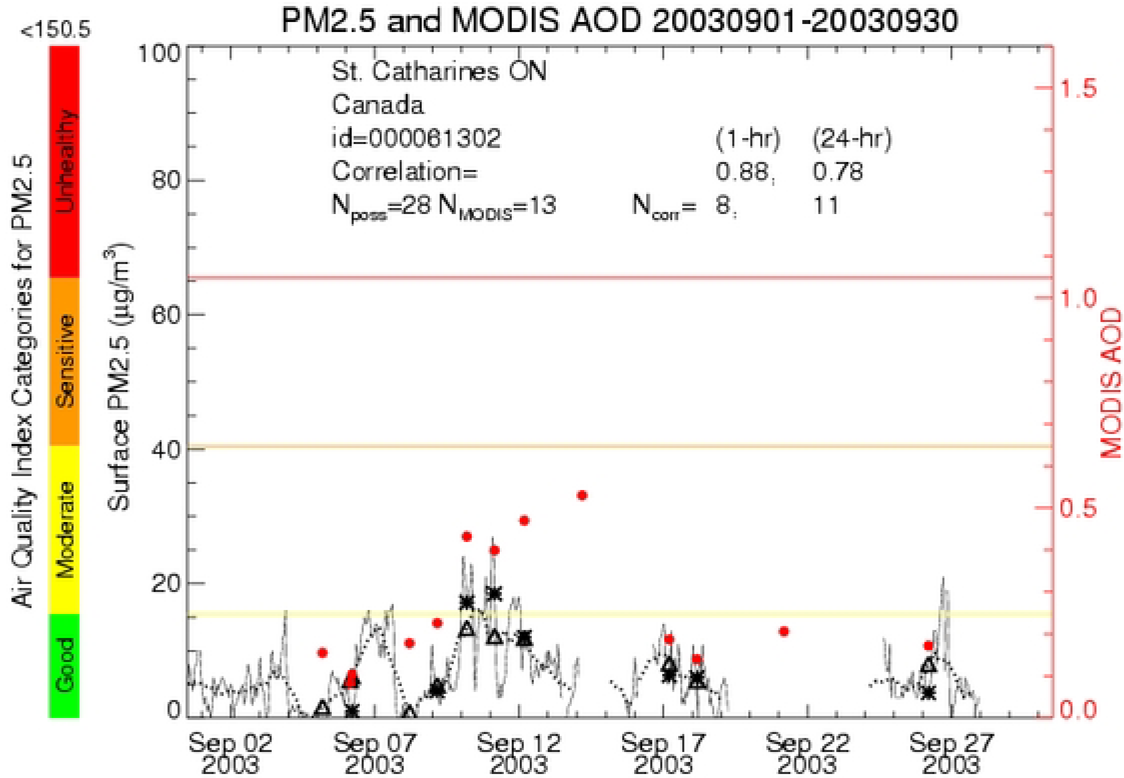
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sarnia ON
Canada
id=000061004
Correlation=
(1-hr) (24-hr)
0.44; 0.22
N_poss=29 N_MODIS=16
N_corr= 13; 13
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



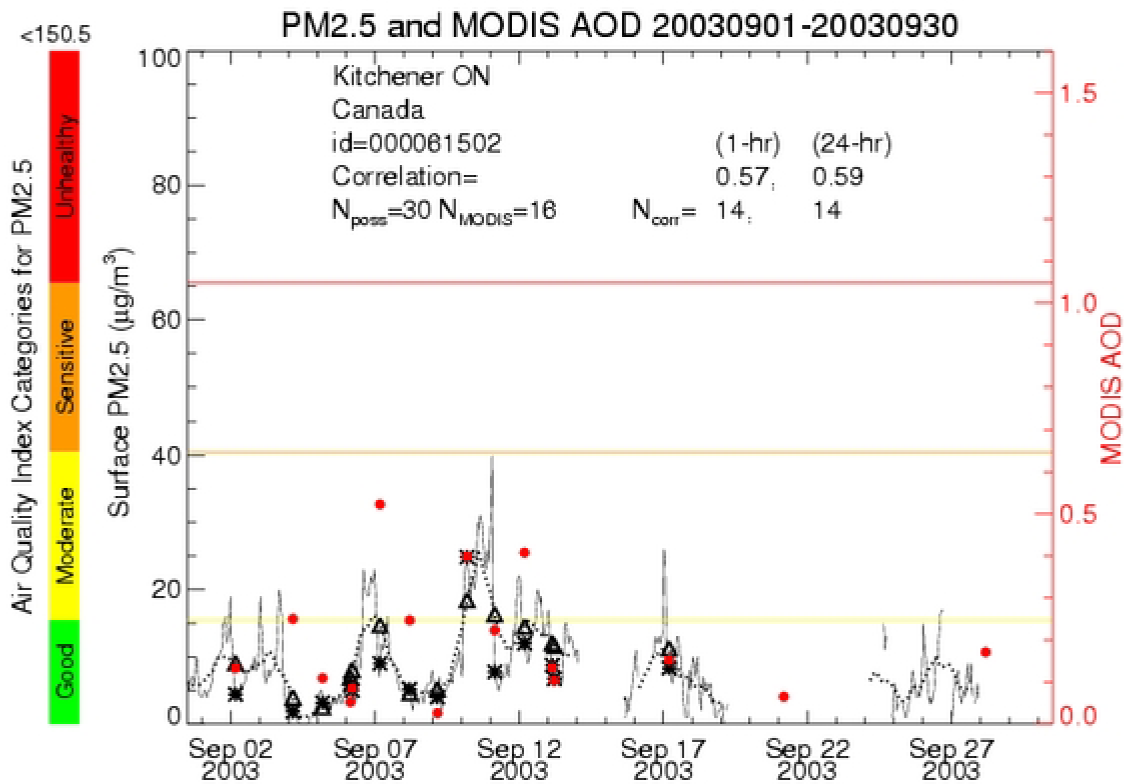
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Peterborough ON
Canada
id=000061104
(1-hr)
(24-hr)
Correlation=
0.83,
0.82
N_{poss}=30 N_{MODIS}=14
N_{corr}=
11,
12
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003



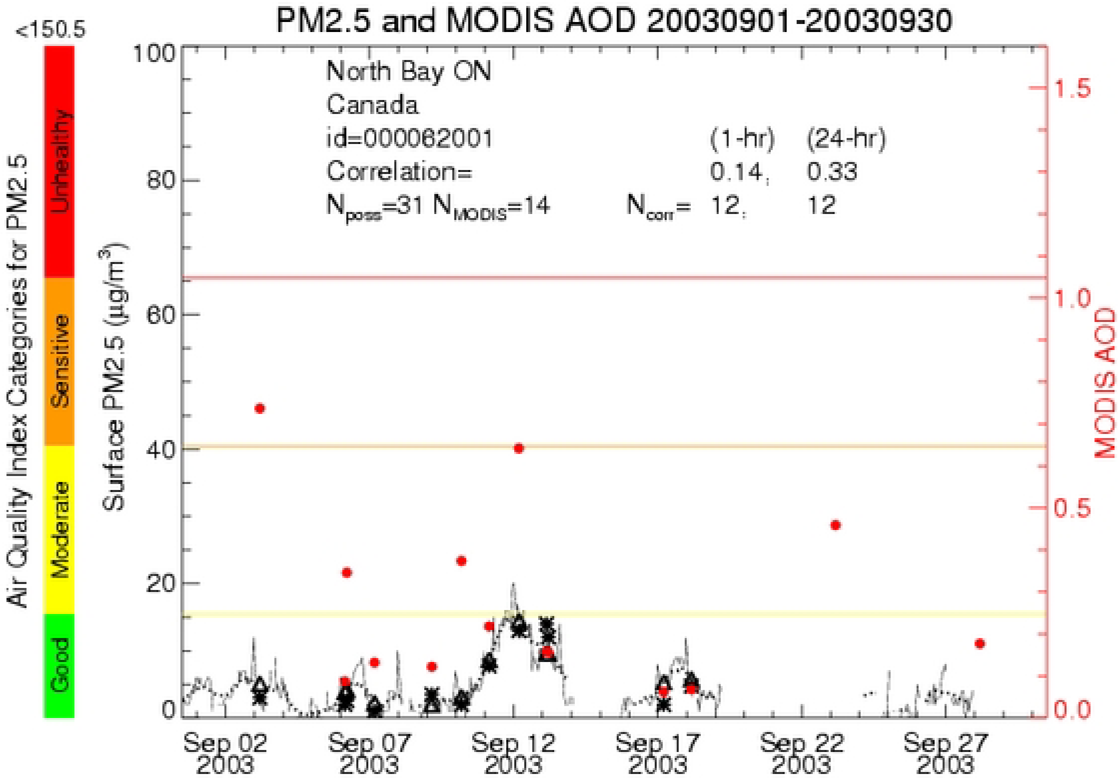
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Cornwall ON
Canada
id=000061201
(1-hr)
(24-hr)
Correlation=
0.89,
0.76
N_{poss}=32 N_{MODIS}=15
N_{corr}=
12,
13
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

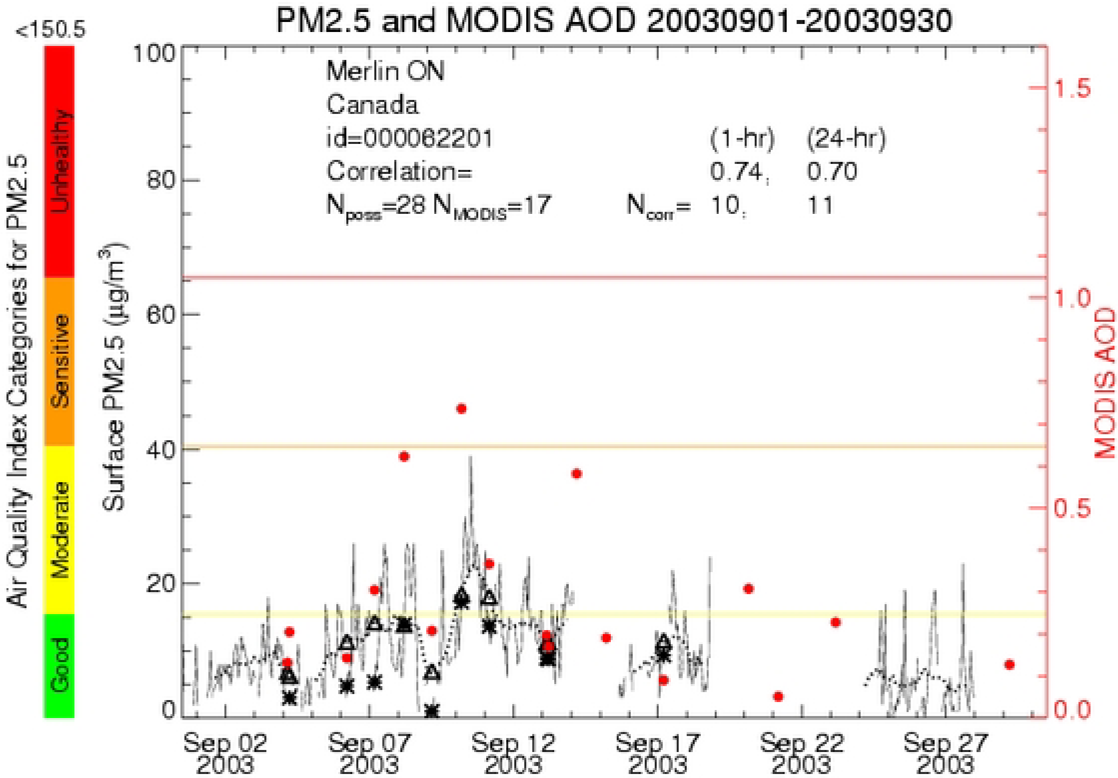


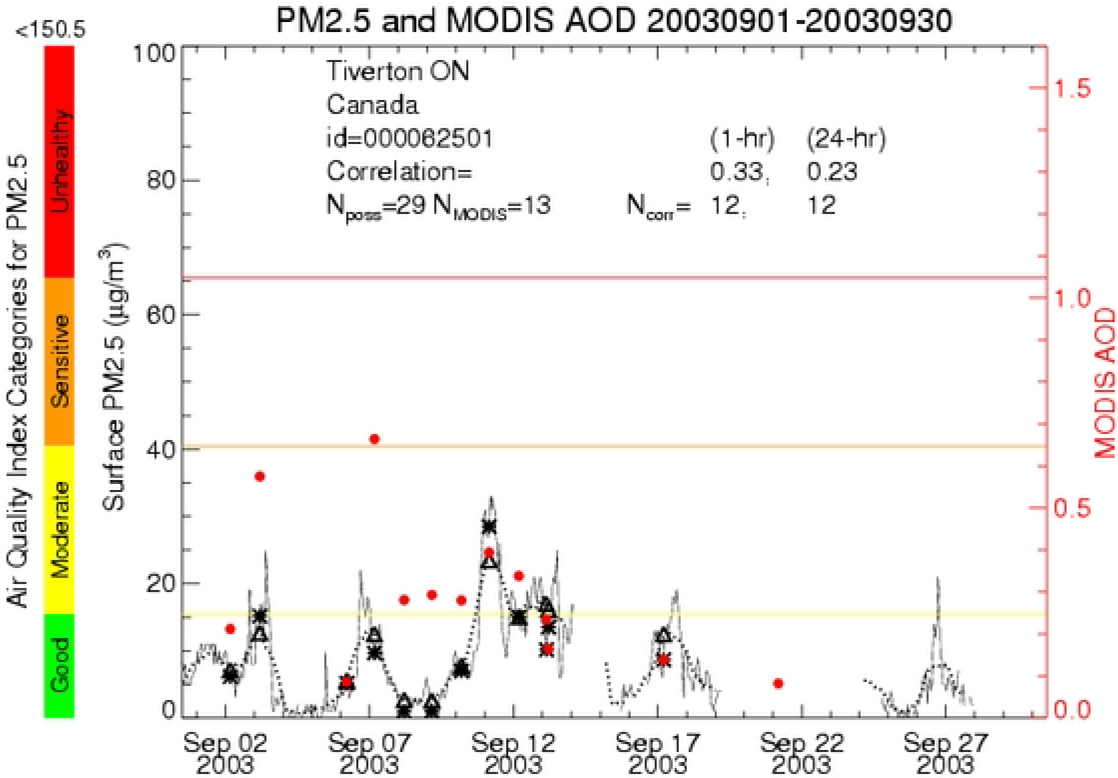
PM2.5 and MODIS AOD 20030901-20030930
<150.5
St. Catharines ON
Canada
id=000061302
(1-hr) (24-hr)
Correlation= 0.88; 0.78
N_{poss}=28 N_{MODIS}=13 N_{corr}= 8; 11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

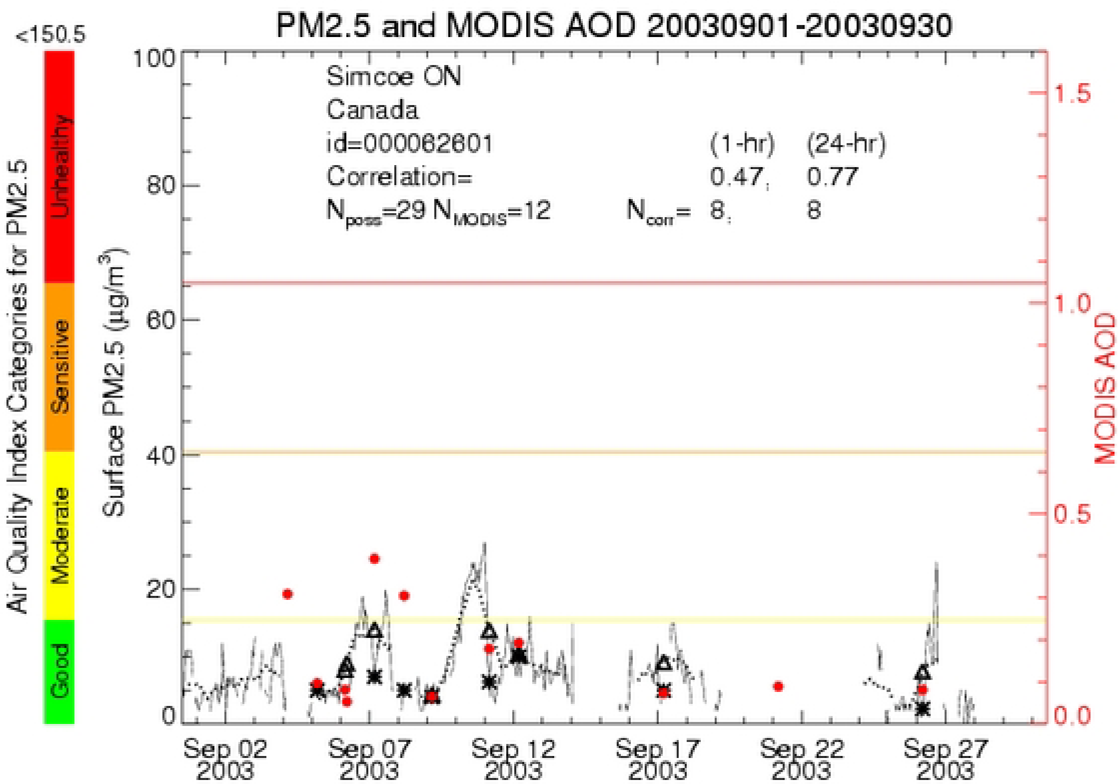


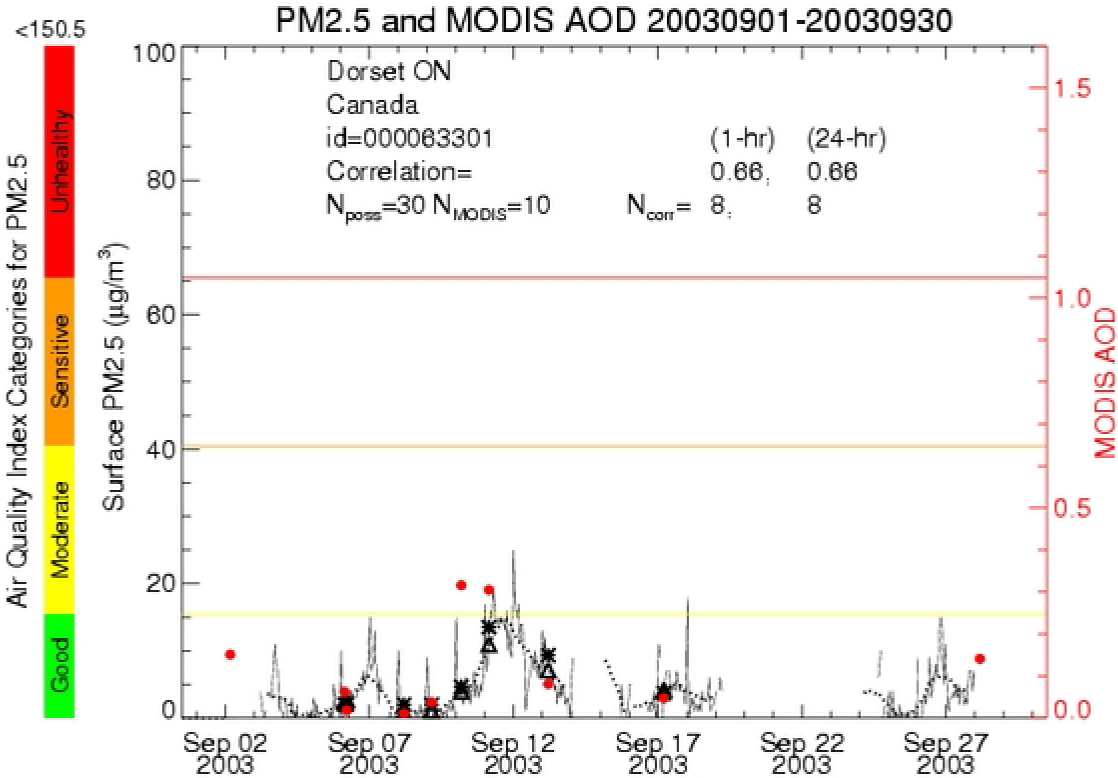
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Kitchener ON
Canada
id=000061502
(1-hr) (24-hr)
Correlation= 0.57; 0.59
N_{poss}=30 N_{MODIS}=16 N_{corr}= 14; 14
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
North Bay ON
Canada
id=000062001
Correlation=
(1-hr) (24-hr)
0.14; 0.33
Nposs=31 NMODIS=14
Ncorr= 12; 12
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

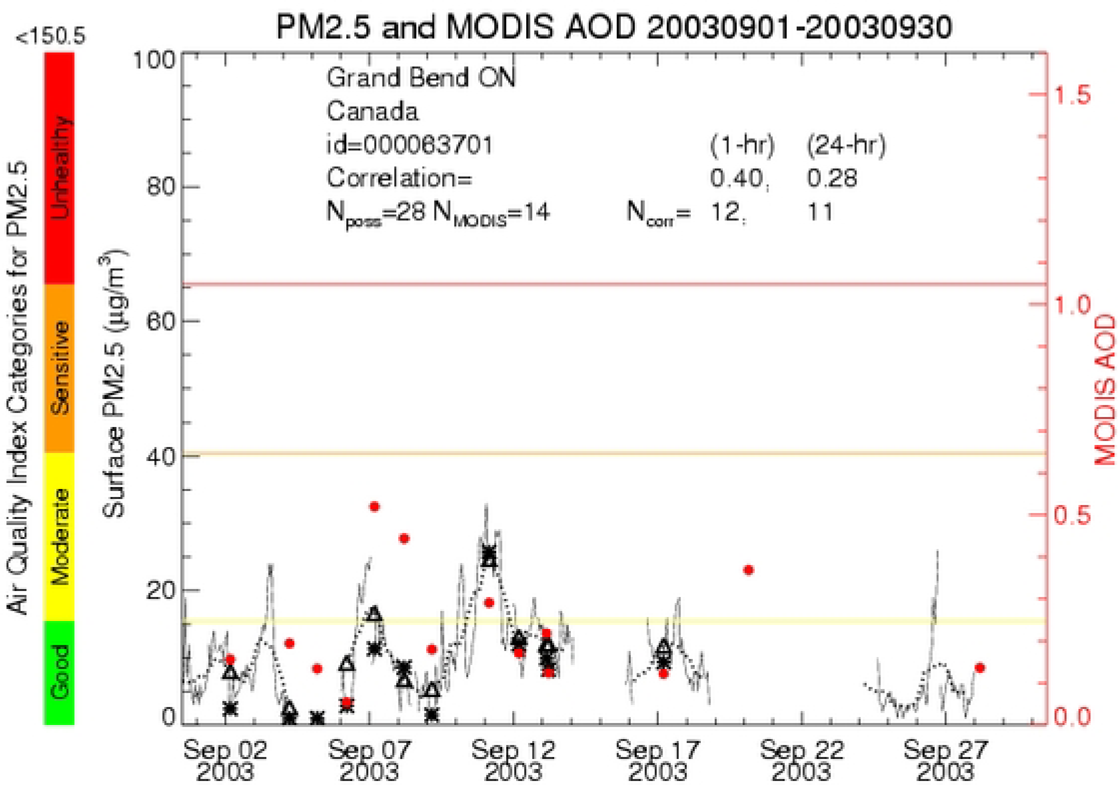

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Merlin ON
Canada
id=000062201
Correlation=
(1-hr) (24-hr)
0.74; 0.70
Nposs=28 NMODIS=17
Ncorr= 10; 11
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Tiverton ON
Canada
id=000062501
(1-hr) (24-hr)
Correlation= 0.33; 0.23
N_{poss}=29 N_{MODIS}=13 N_{corr}= 12; 12
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

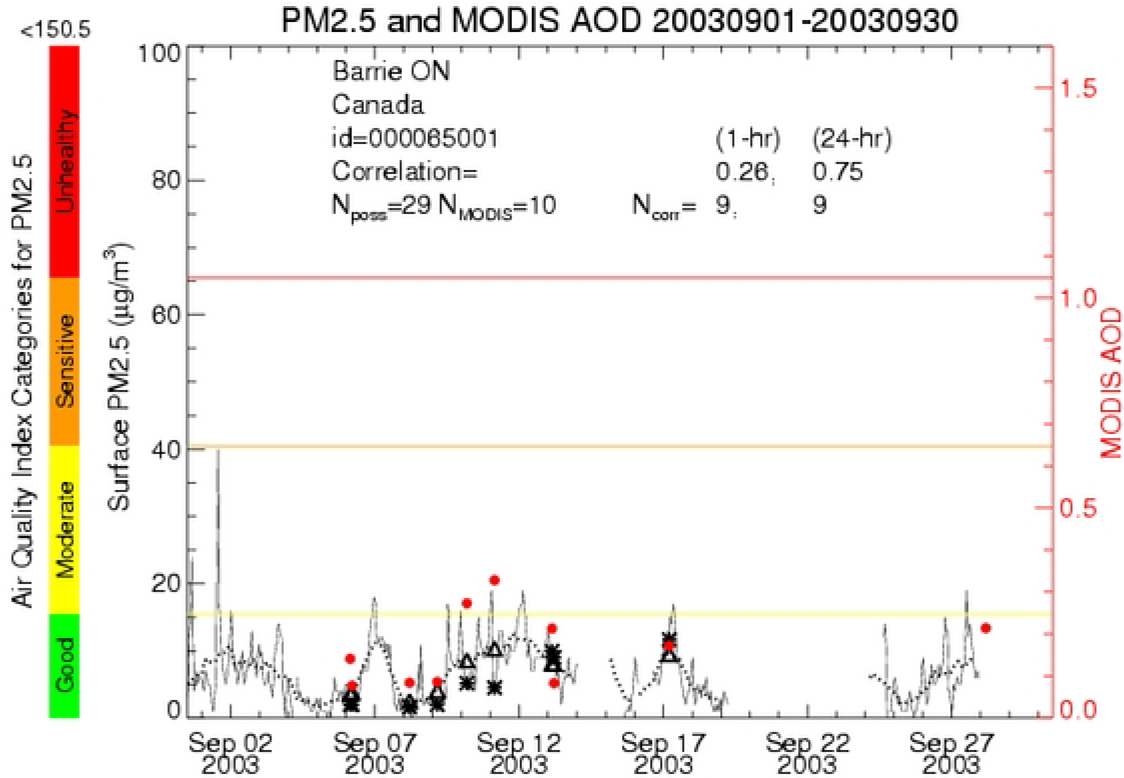

PM2.5 and MODIS AOD 20030901-20030930
Simcoe ON
Canada
id=000062601
(1-hr) (24-hr)
Correlation= 0.47; 0.77
N_{poss}=29 N_{MODIS}=12 N_{corr}= 8; 8
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

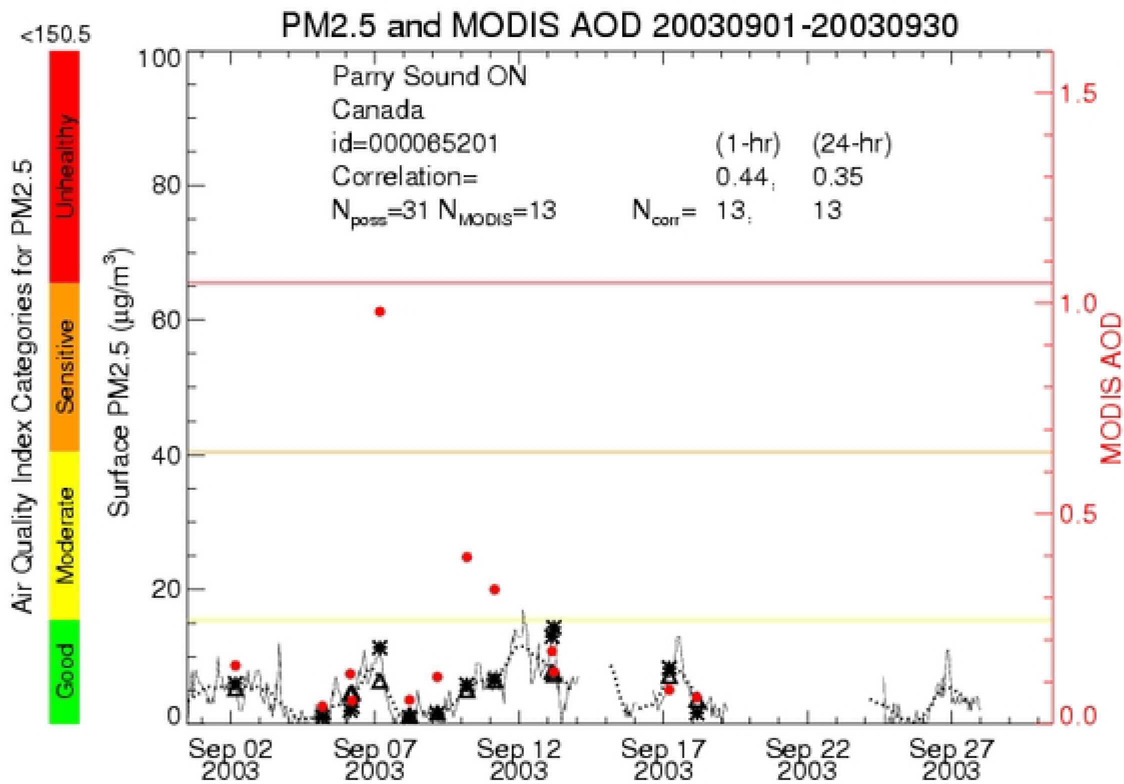


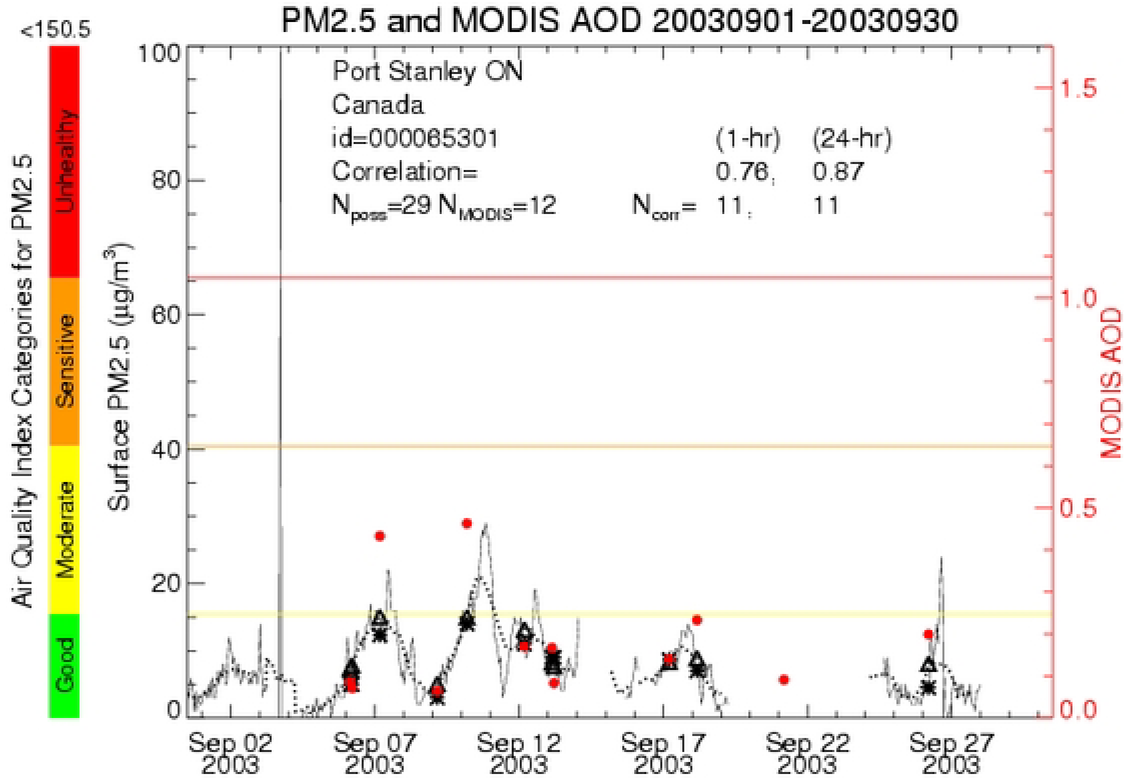
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Dorset ON
Canada
id=000063301
Correlation=
N_{poss}=30 N_{MODIS}=10
N_{corr}=
(1-hr)
(24-hr)
0.66;
0.66
8;
8
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

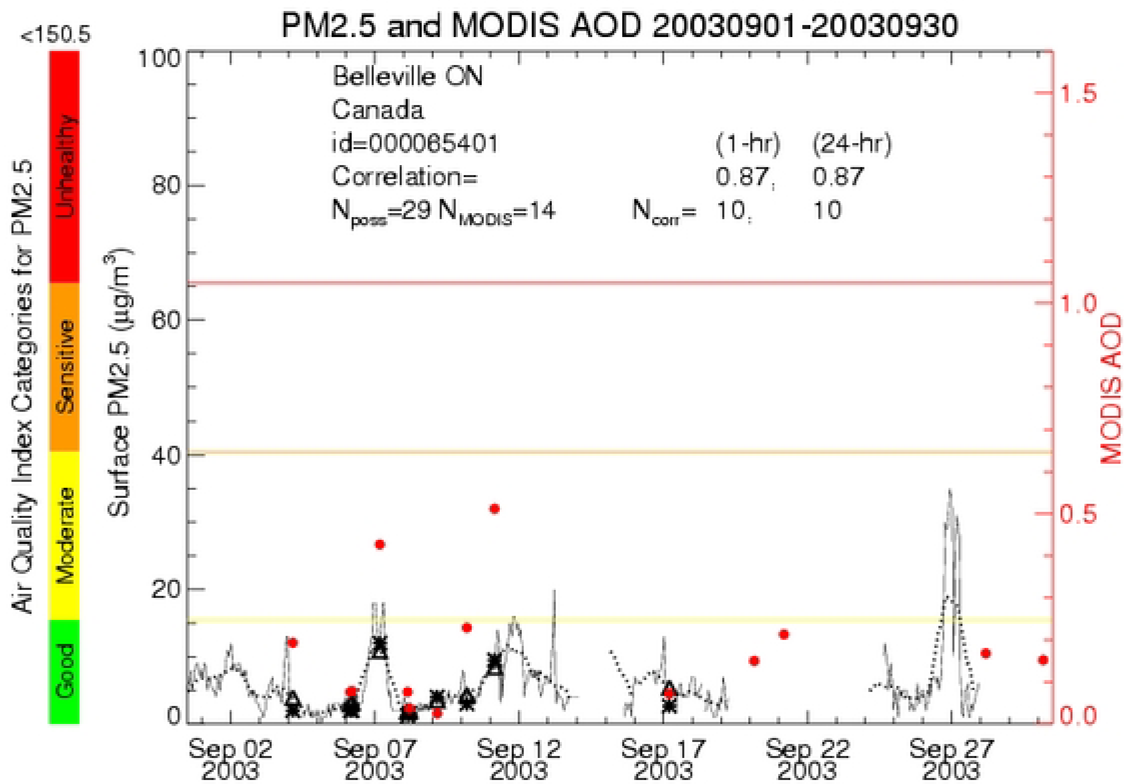


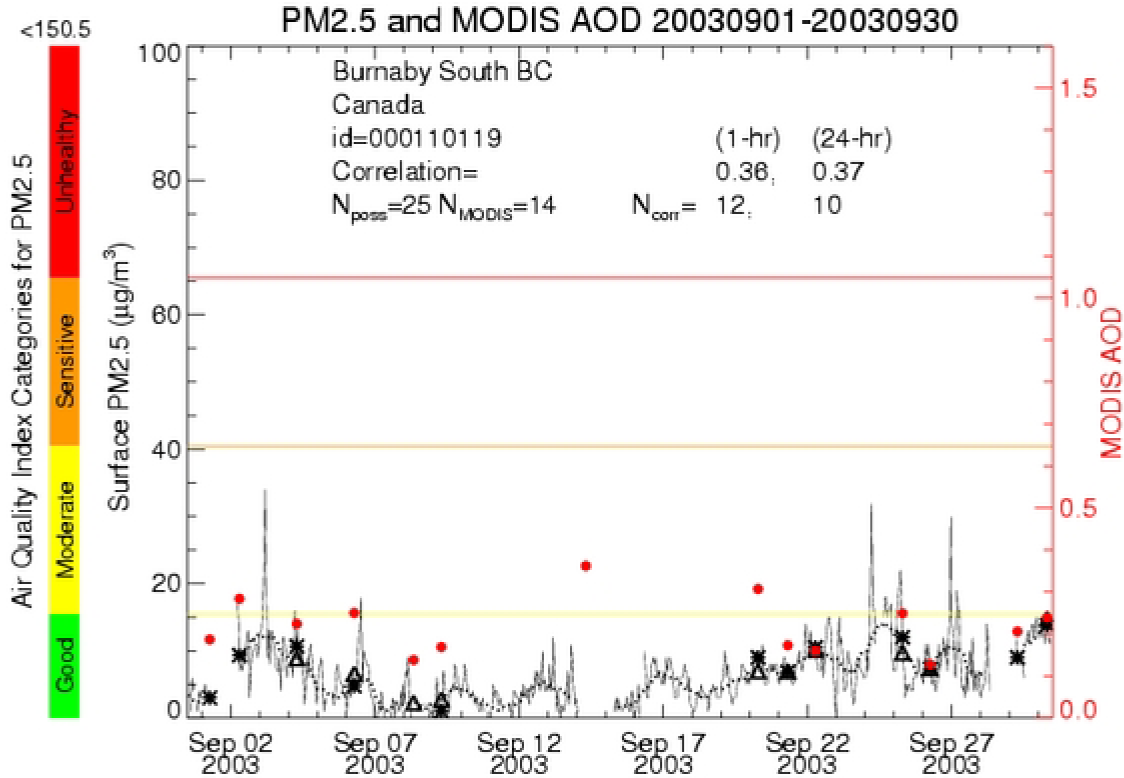
PM2.5 and MODIS AOD 20030901-20030930
<150.5
Grand Bend ON
Canada
id=000063701
Correlation=
N_{poss}=28 N_{MODIS}=14
N_{corr}=
(1-hr)
(24-hr)
0.40;
0.28
12;
11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

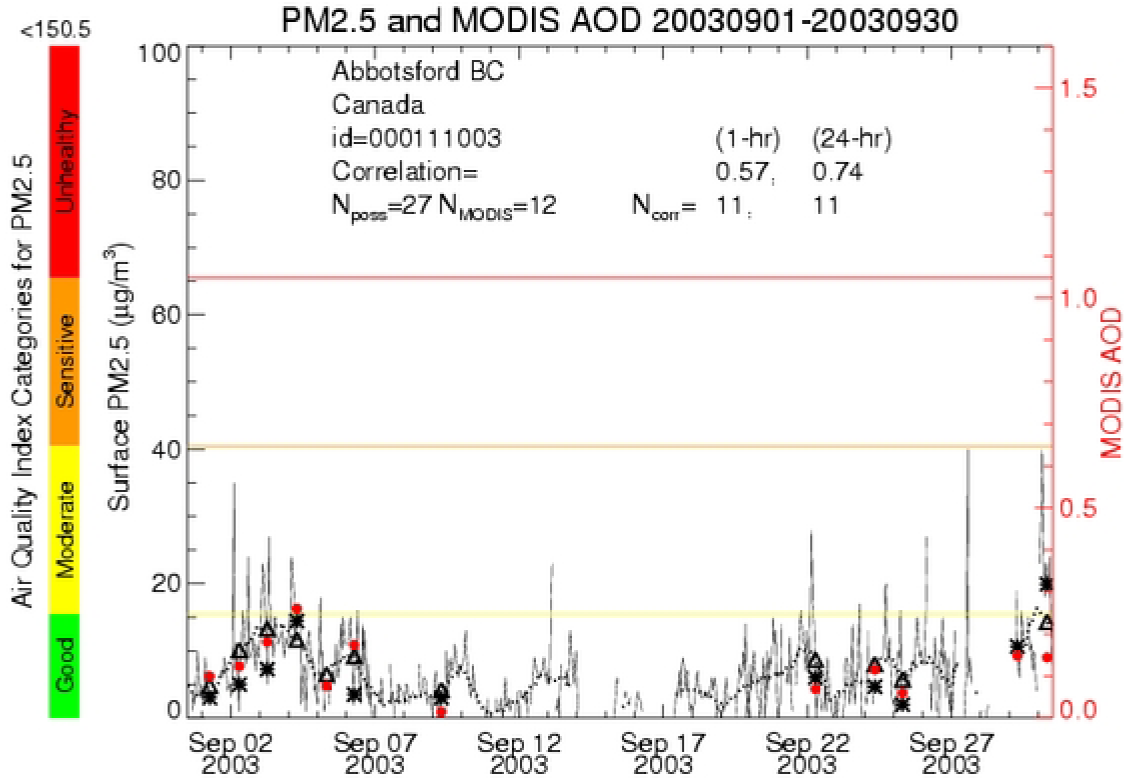

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Barrie ON
Canada
id=000065001
(1-hr) (24-hr)
Correlation= 0.26; 0.75
Nposs=29 NMODIS=10 Ncorr= 9; 9
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

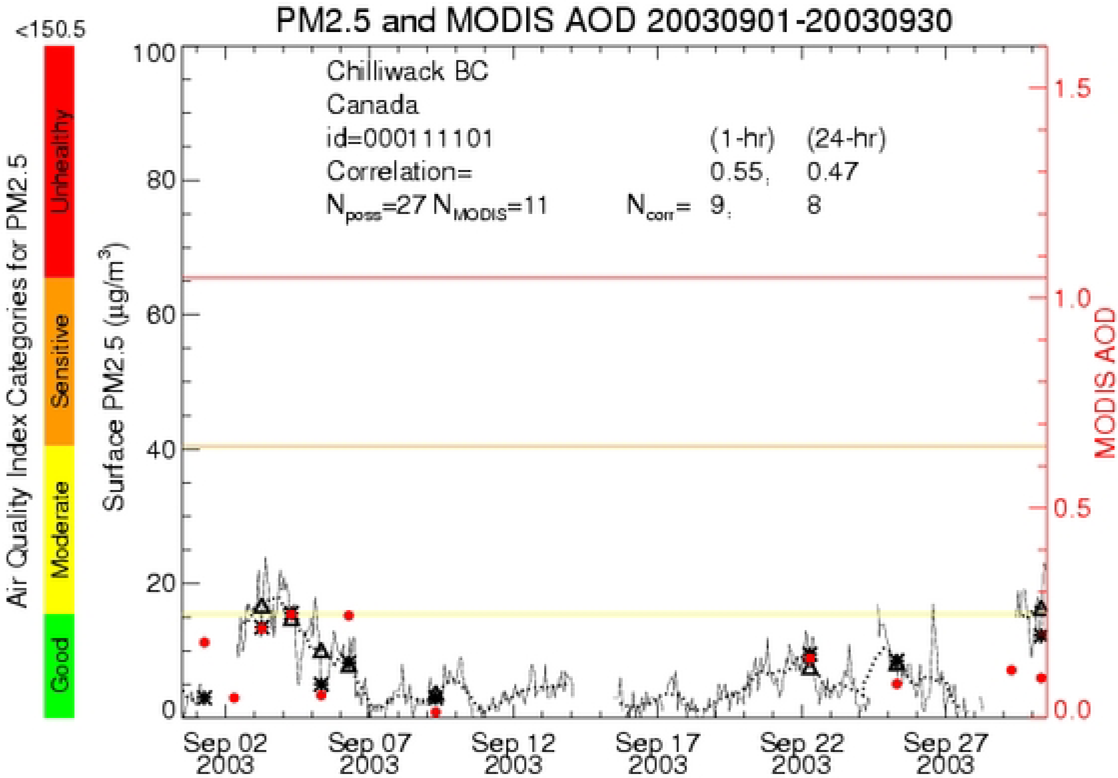

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m3)
MODIS AOD
Parry Sound ON
Canada
id=000065201
(1-hr) (24-hr)
Correlation= 0.44; 0.35
Nposs=31 NMODIS=13 Ncorr= 13; 13
100
80
60
40
20
0
1.5
1.0
0.5
0.0
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

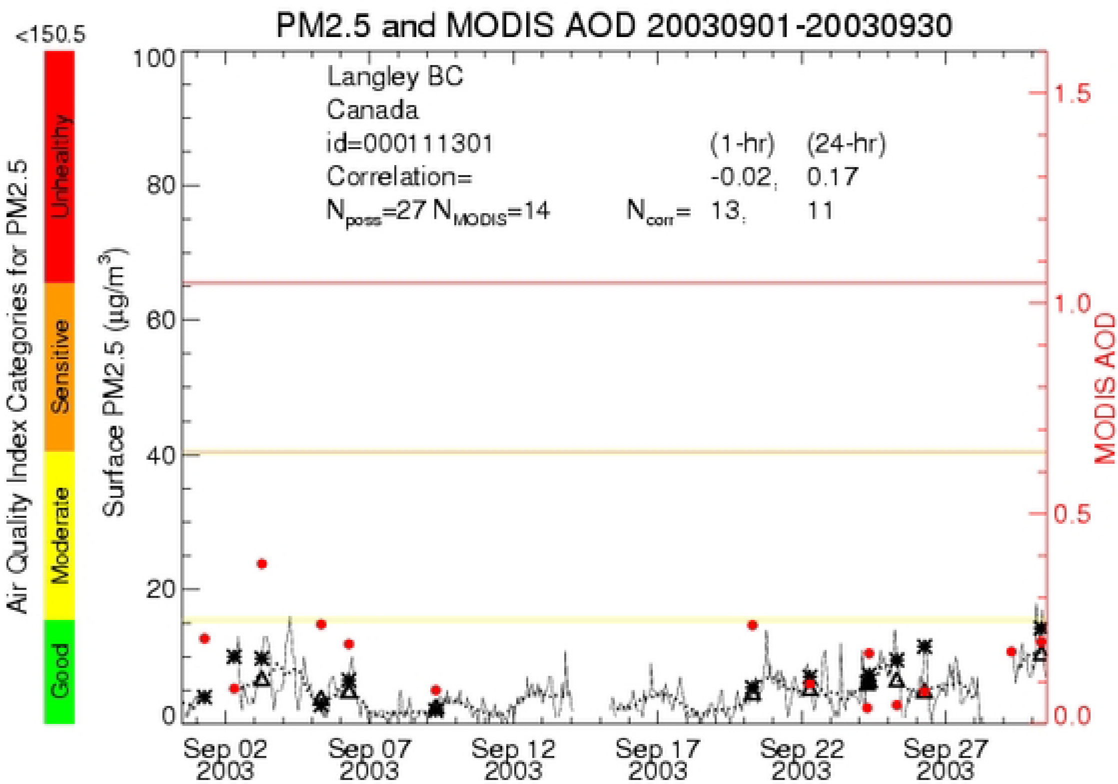

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Port Stanley ON
Canada
id=000065301
(1-hr) (24-hr)
Correlation= 0.76; 0.87
N_{poss}=29 N_{MODIS}=12 N_{corr}= 11; 11
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
<150.5
Belleville ON
Canada
id=000065401
(1-hr) (24-hr)
Correlation= 0.87; 0.87
N_{poss}=29 N_{MODIS}=14 N_{corr}= 10; 10
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m^3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003


PM2.5 and MODIS AOD 20030901-20030930
Burnaby South BC
Canada
id=000110119
Correlation=
N_{poss}=25 N_{MODIS}=14
(1-hr) (24-hr)
0.36; 0.37
N_{corr}= 12; 10
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

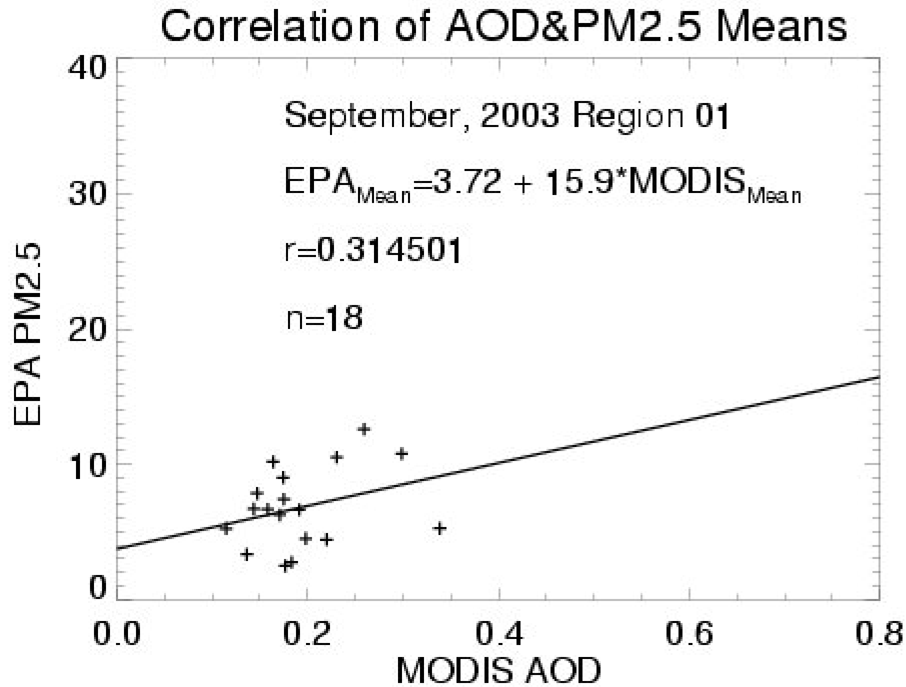

PM2.5 and MODIS AOD 20030901-20030930
Abbotsford BC
Canada
id=000111003
Correlation=
N_{poss}=27 N_{MODIS}=12
(1-hr) (24-hr)
0.57; 0.74
N_{corr}= 11; 11
Air Quality Index Categories for PM2.5
<150.5
Unhealthy
Sensitive
Moderate
Good
Surface PM2.5 (μg/m³)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

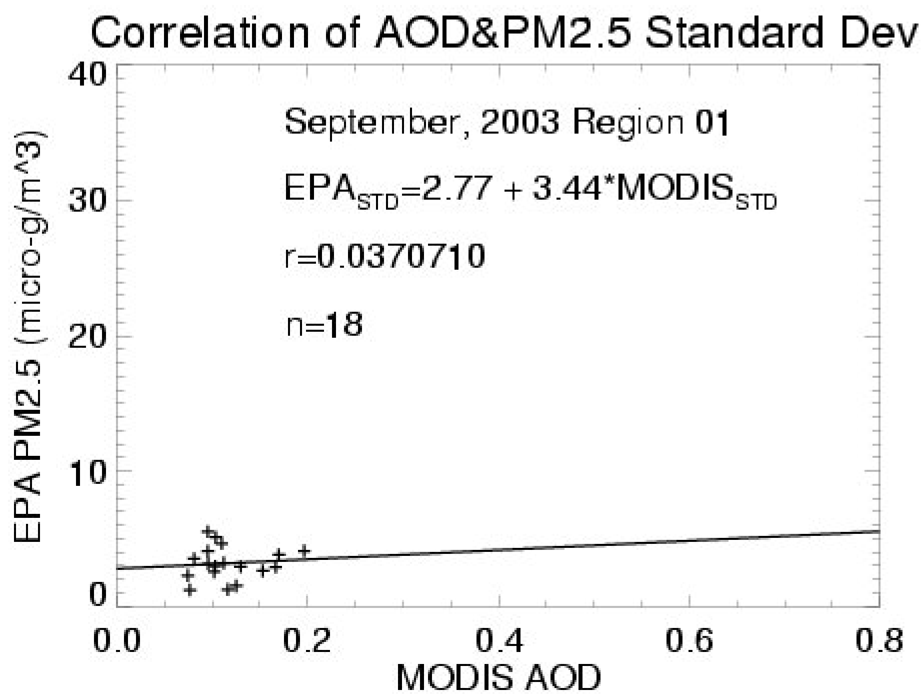

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Chilliwack BC
Canada
id=000111101
Correlation=
(1-hr) (24-hr)
0.55, 0.47
Nposs=27 NMODIS=11
Ncorr= 9, 8
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

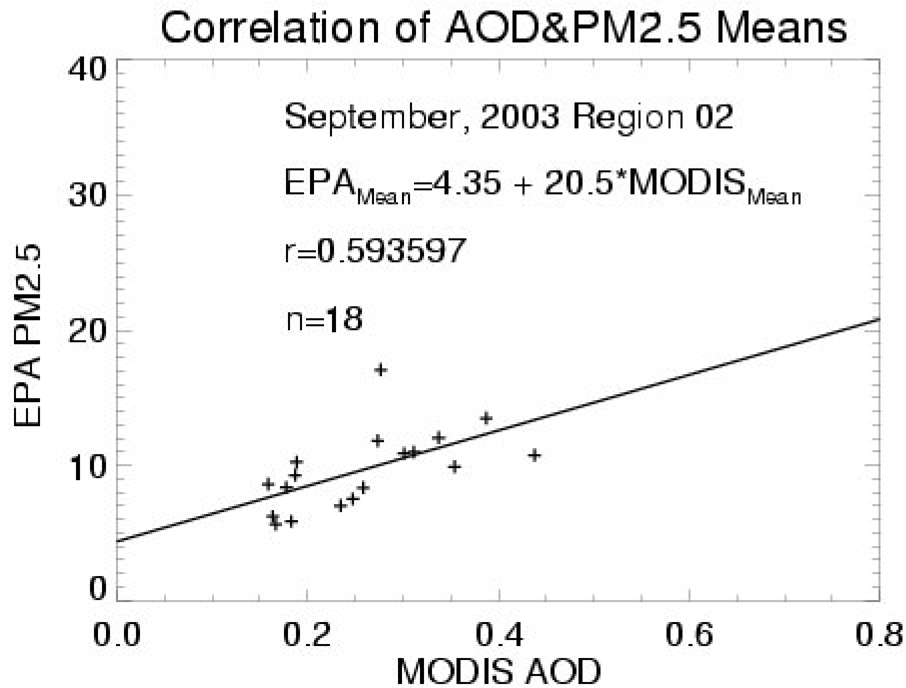

PM2.5 and MODIS AOD 20030901-20030930
<150.5
Air Quality Index Categories for PM2.5
Unhealthy
Sensitive
Moderate
Good
Langley BC
Canada
id=000111301
Correlation=
(1-hr) (24-hr)
-0.02, 0.17
Nposs=27 NMODIS=14
Ncorr= 13, 11
Surface PM2.5 (μg/m3)
MODIS AOD
Sep 02 2003
Sep 07 2003
Sep 12 2003
Sep 17 2003
Sep 22 2003
Sep 27 2003

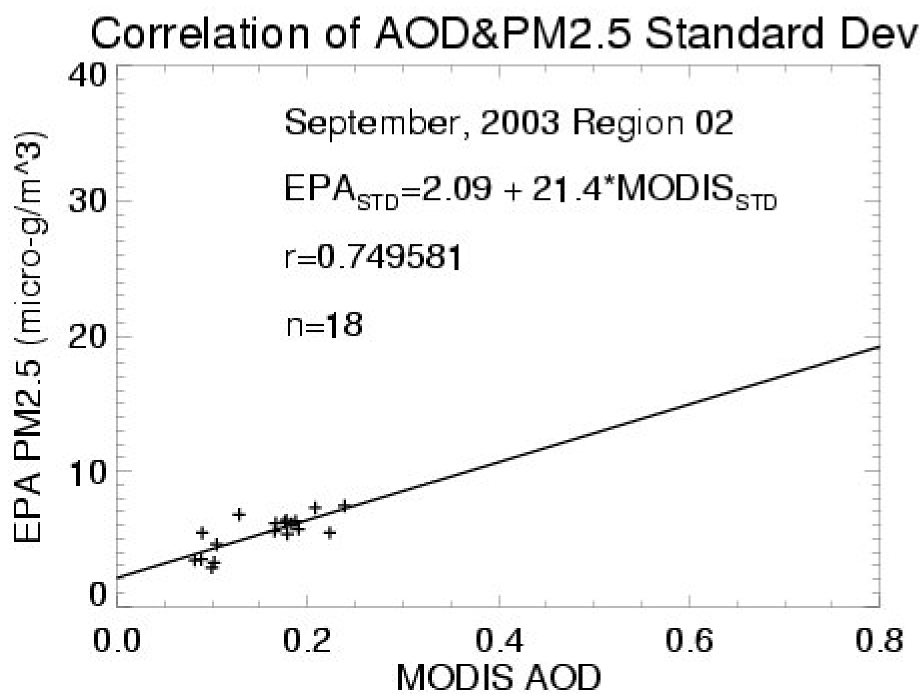
Appendix C

Regional Mean Satellite and In-Situ Comparisons


Correlation of AOD&PM2.5 Means
September, 2003 Region 01
EPA_Mean=3.72 + 15.9*MODIS_Mean
r=0.314501
n=18
EPA PM2.5
MODIS AOD
0
10
20
30
40
0.0
0.2
0.4
0.6
0.8


Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 01
EPA_STD=2.77 + 3.44*MODIS_STD
r=0.0370710
n=18
EPA PM2.5 (micro-g/m^3)
MODIS AOD
0
10
20
30
40
0.0
0.2
0.4
0.6
0.8


Correlation of AOD&PM2.5 Means
September, 2003 Region 02
EPA$_{Mean}$=4.35 + 20.5*MODIS$_{Mean}$
r=0.593597
n=18
EPA PM2.5
MODIS AOD
0
10
20
30
40
0.0
0.2
0.4
0.6
0.8


Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 02
EPA$_{STD}$=2.09 + 21.4*MODIS$_{STD}$
r=0.749581
n=18
EPA PM2.5 (micro-g/m^3)
MODIS AOD
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0.2
0.4
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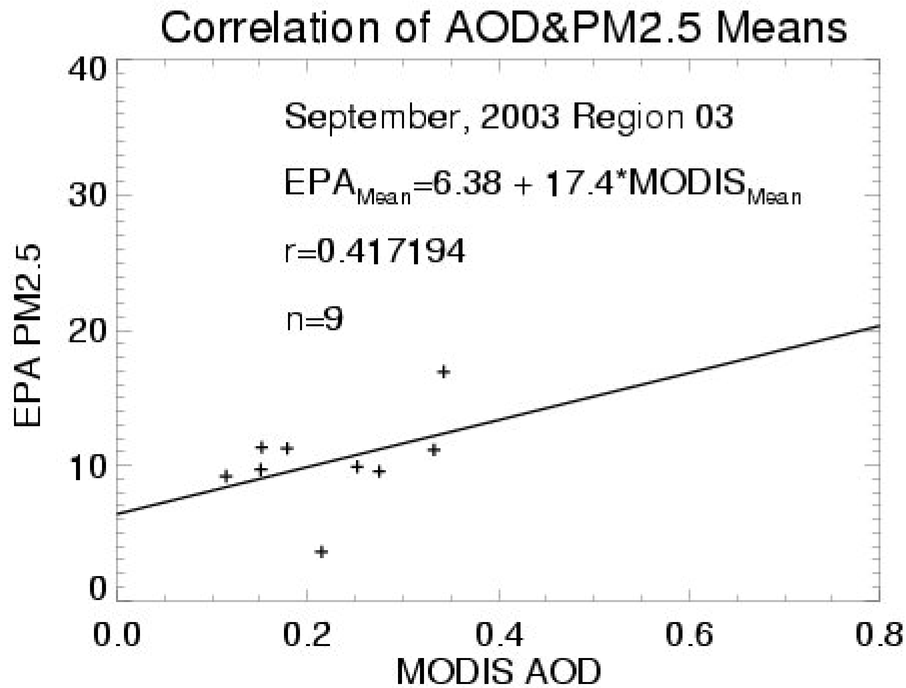
0.8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September, 2003 Region 03
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r=0.417194
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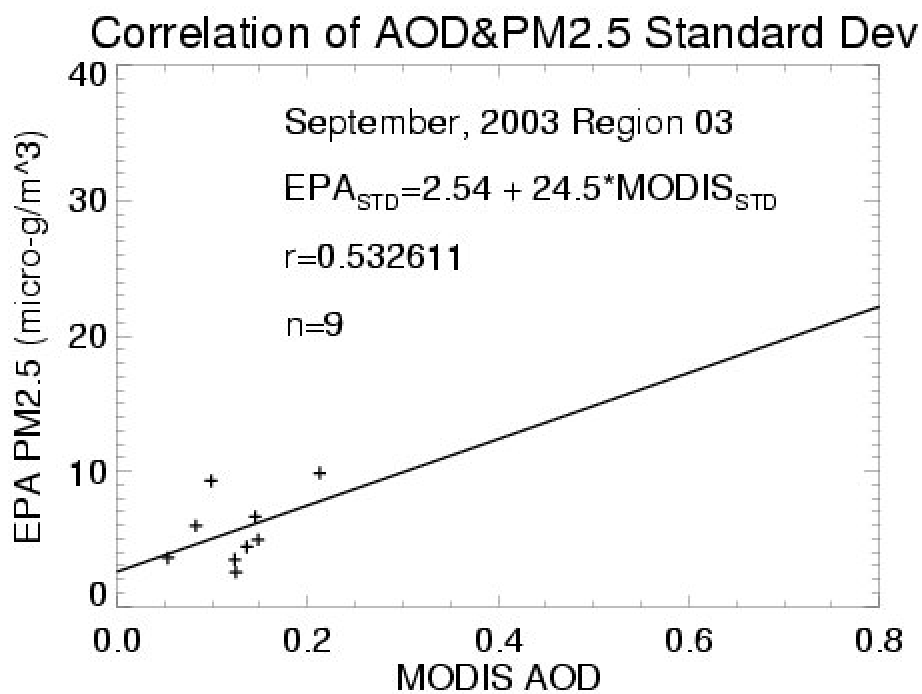
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September, 2003 Region 03
EPA$_{STD}$=2.54 + 24.5*MODIS$_{STD}$
r=0.532611
n=9
EPA PM2.5 (micro-g/m^3)
MODIS AOD
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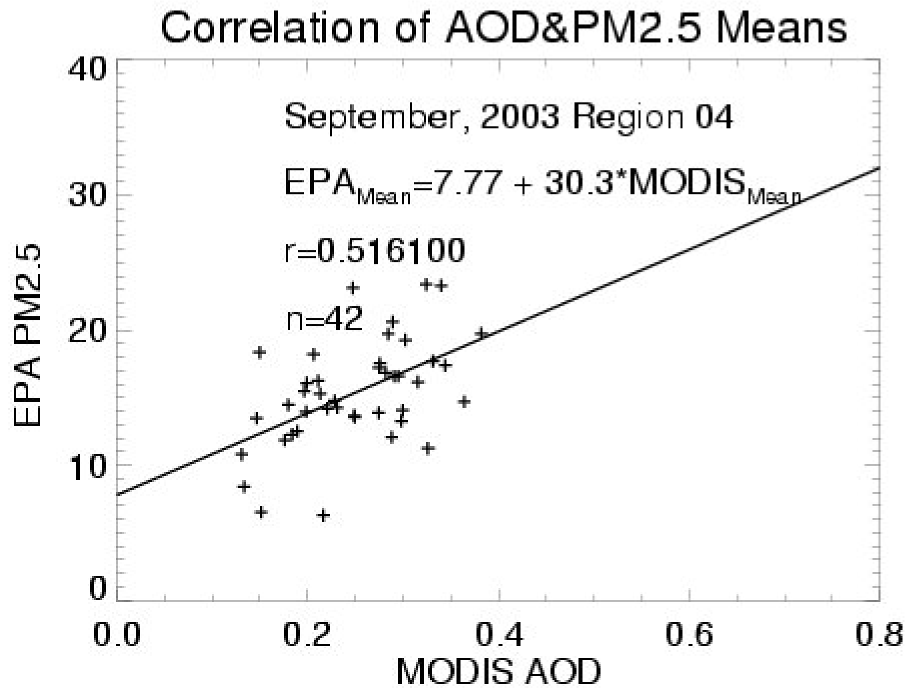
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September, 2003 Region 04
EPA$_{Mean}$=7.77 + 30.3*MODIS$_{Mean}$
r=0.516100
n=42
EPA PM2.5
MODIS AOD
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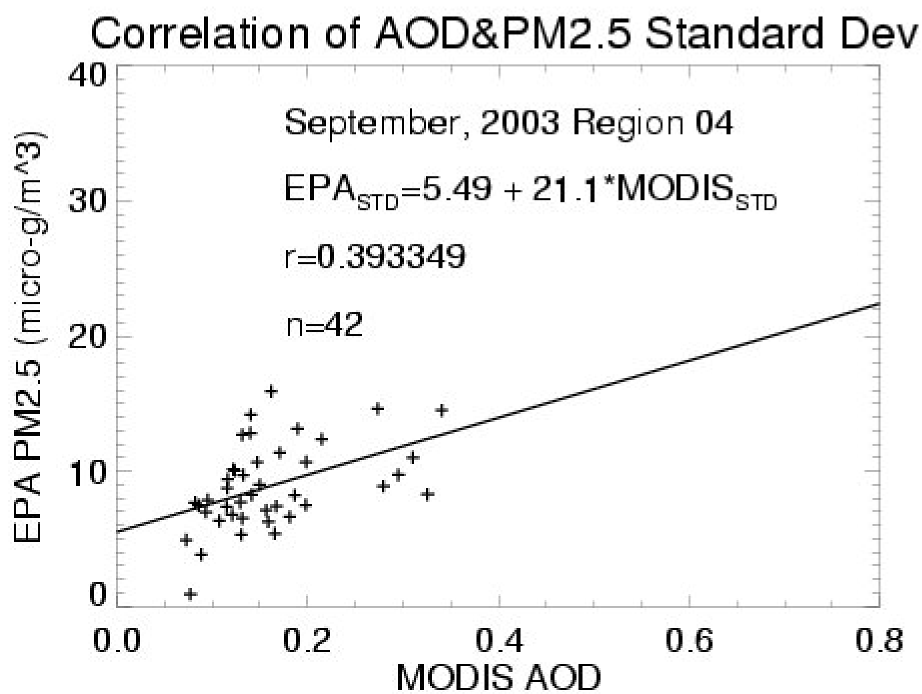
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September, 2003 Region 04
EPA$_{STD}$=5.49 + 21.1*MODIS$_{STD}$
r=0.393349
n=42
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MODIS AOD
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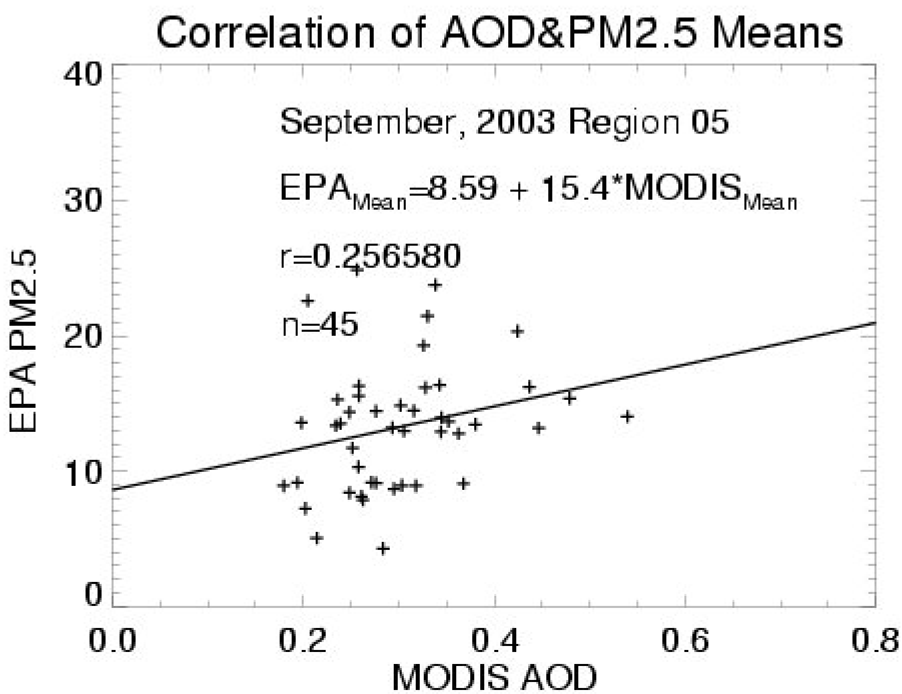
Correlation of AOD&PM2.5 Means
September, 2003 Region 05
EPA$_{Mean}$=8.59 + 15.4*MODIS$_{Mean}$
r=0.256580
n=45
EPA PM2.5
MODIS AOD
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0.4
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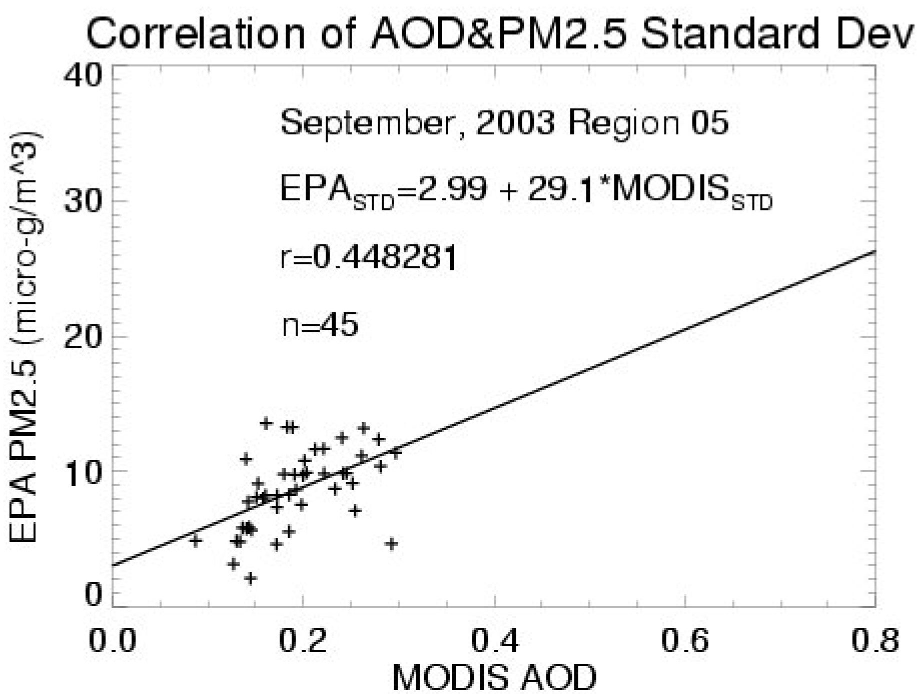
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September, 2003 Region 05
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r=0.448281
n=45
EPA PM2.5 (micro-g/m^3)
MODIS AOD
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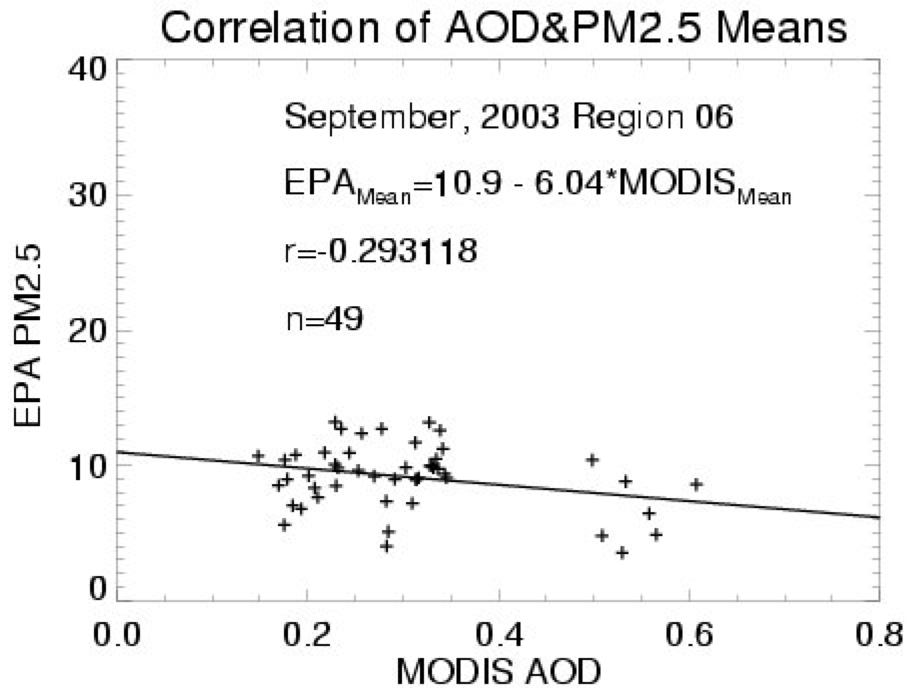

Correlation of AOD&PM2.5 Means
September, 2003 Region 06
EPA$_{Mean}$=10.9 - 6.04*MODIS$_{Mean}$
r=-0.293118
n=49
EPA PM2.5
MODIS AOD
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0.6
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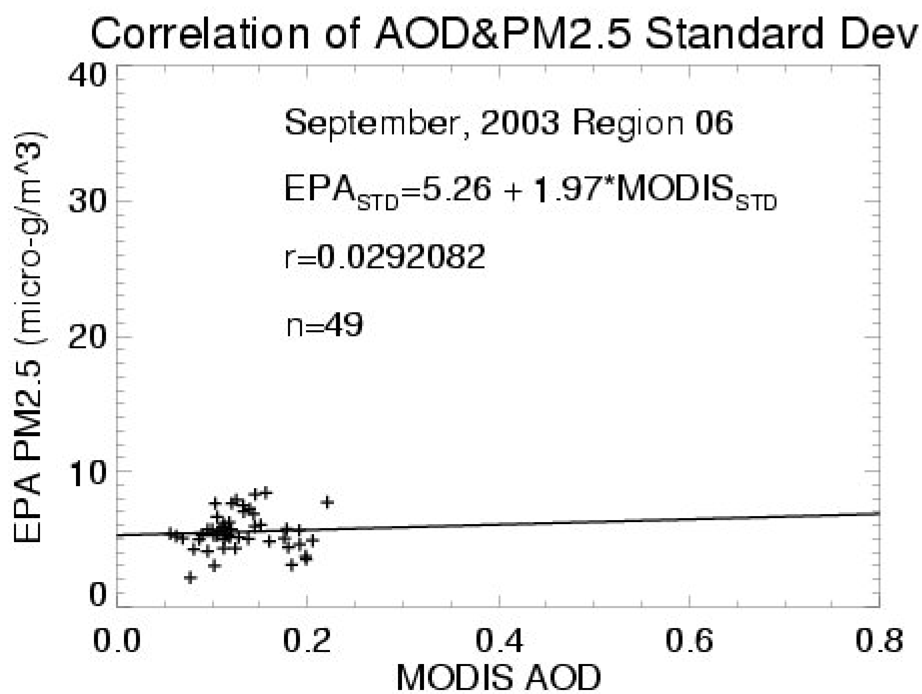

Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 06
EPA$_{STD}$=5.26 + 1.97*MODIS$_{STD}$
r=0.0292082
n=49
EPA PM2.5 (micro-g/m^3)
MODIS AOD
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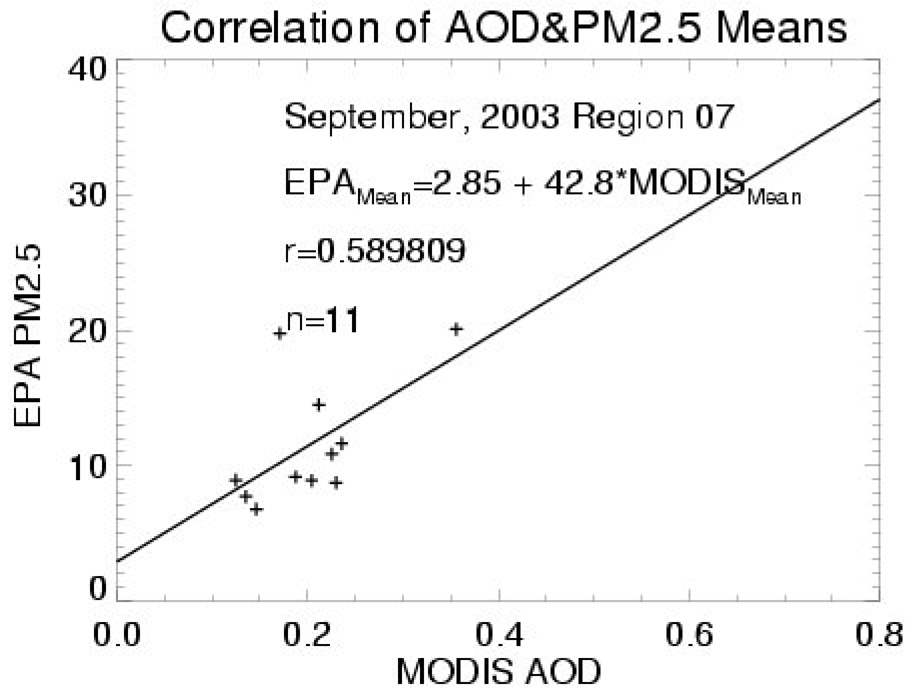
Correlation of AOD&PM2.5 Means
September, 2003 Region 07
EPA_Mean=2.85 + 42.8*MODIS_Mean
r=0.589809
n=11
EPA PM2.5
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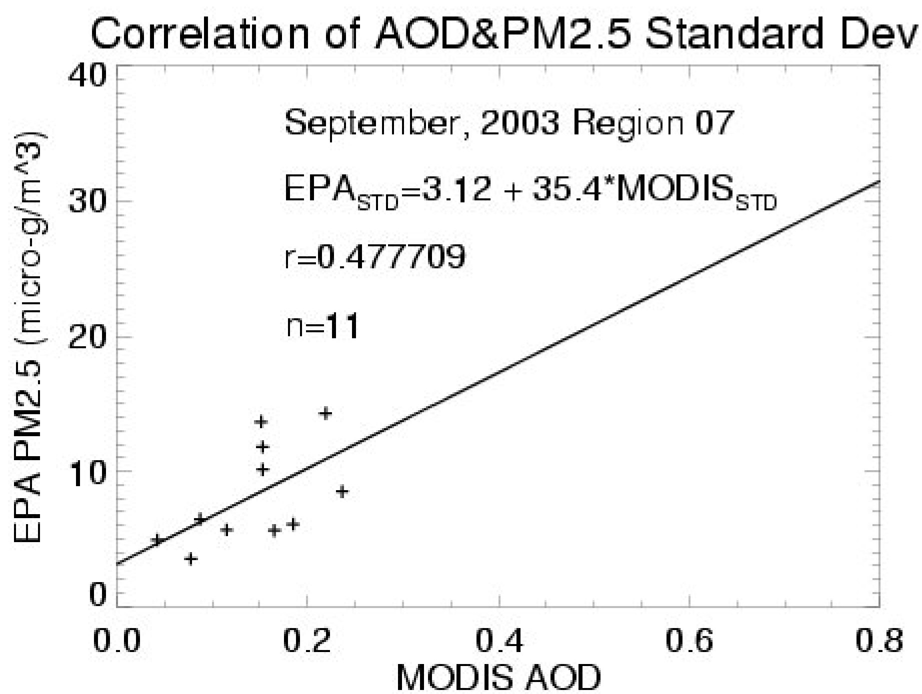
Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 07
EPA_STD=3.12 + 35.4*MODIS_STD
r=0.477709
n=11
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MODIS AOD
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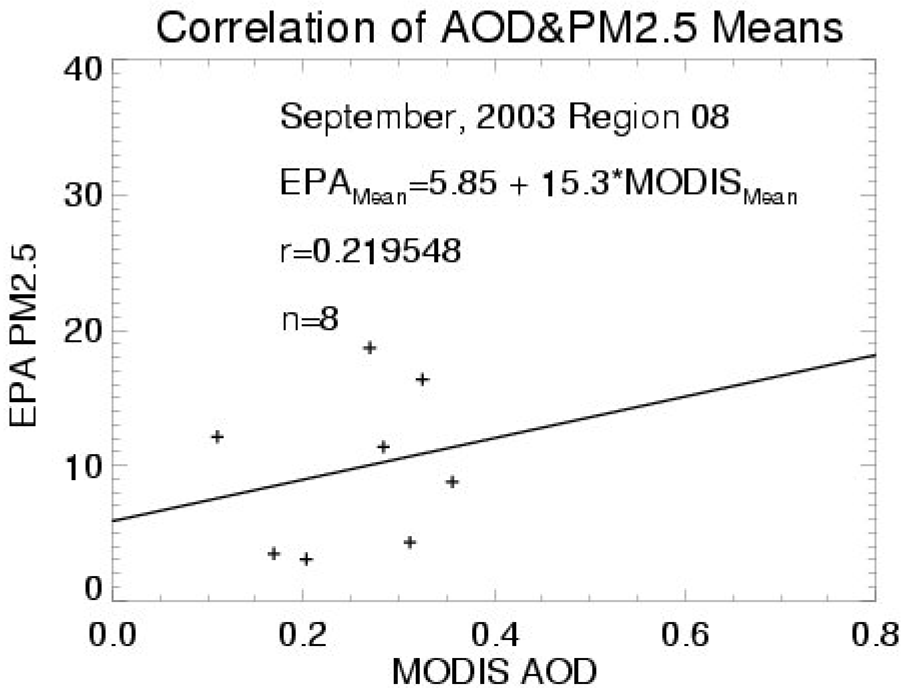

Correlation of AOD&PM2.5 Means
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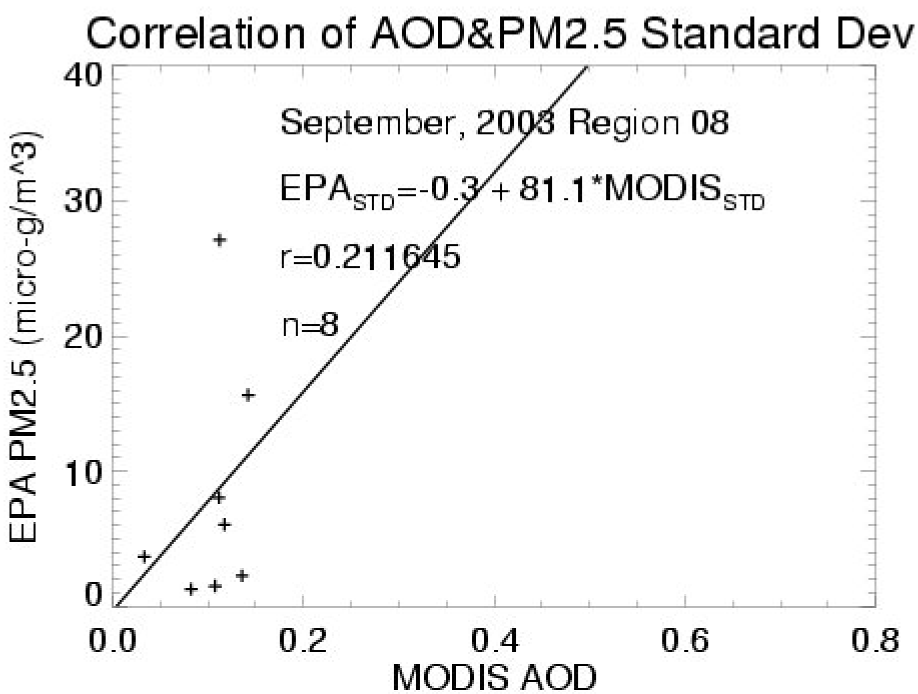
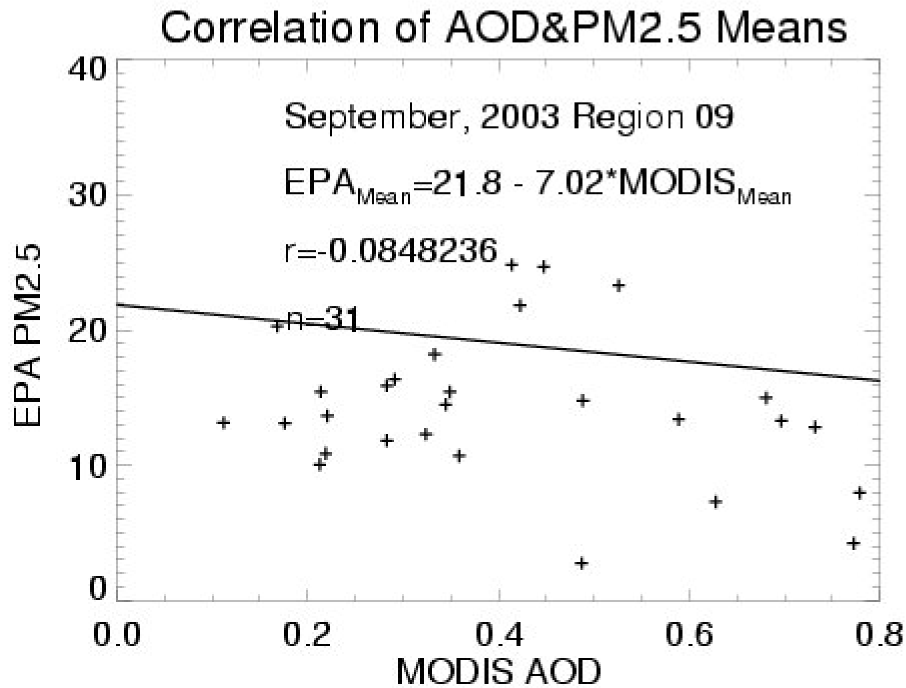
EPA_Mean=5.85 + 15.3*MODIS_Mean
r=0.219548
n=8
EPA PM2.5
MODIS AOD



Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 08
EPA_STD=-0.3 + 81.1*MODIS_STD
r=0.211645
n=8
EPA PM2.5 (micro-g/m^3)
MODIS AOD


Correlation of AOD&PM2.5 Means
September, 2003 Region 09
EPA$_{Mean}$=21.8 - 7.02*MODIS$_{Mean}$
r=-0.0848236
n=31
EPA PM2.5
MODIS AOD
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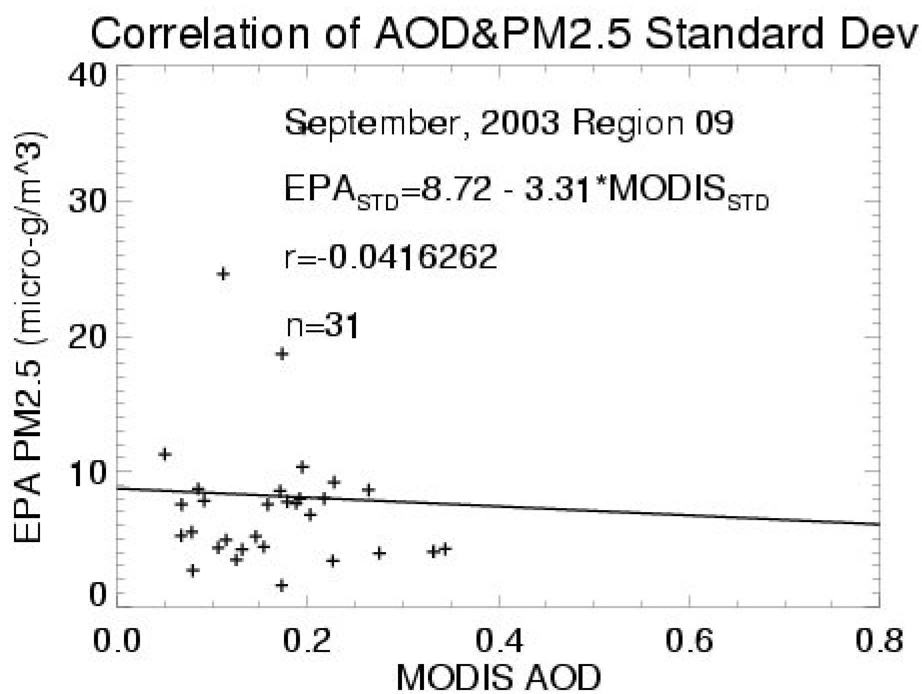
Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 09
EPA$_{STD}$=8.72 - 3.31*MODIS$_{STD}$
r=-0.0416262
n=31
EPA PM2.5 (micro-g/m^3)
MODIS AOD
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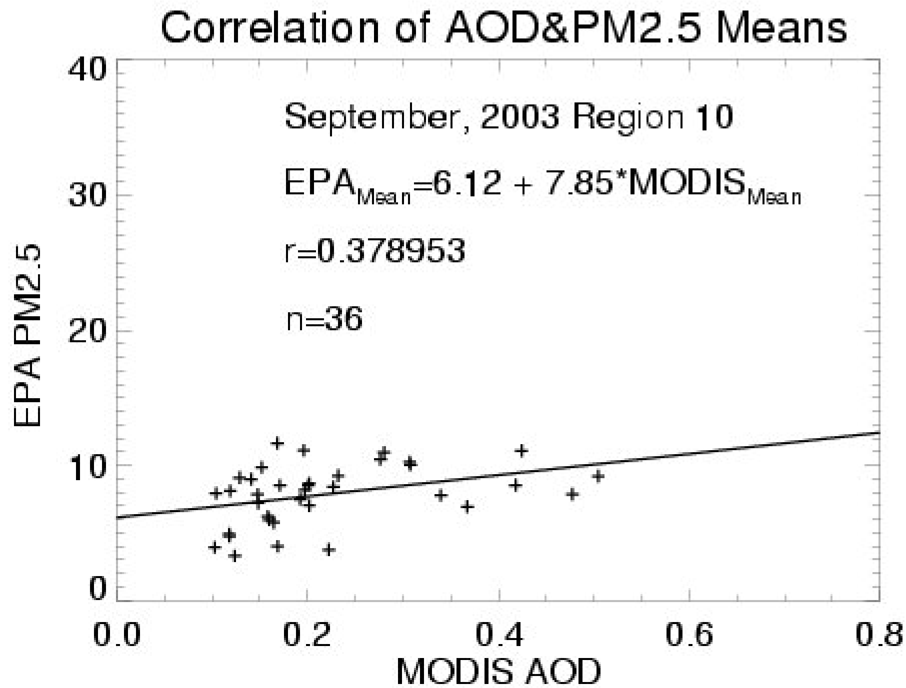
0.6
0.8


Correlation of AOD&PM2.5 Means
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EPA$_{Mean}$=6.12 + 7.85*MODIS$_{Mean}$
r=0.378953
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EPA PM2.5
MODIS AOD
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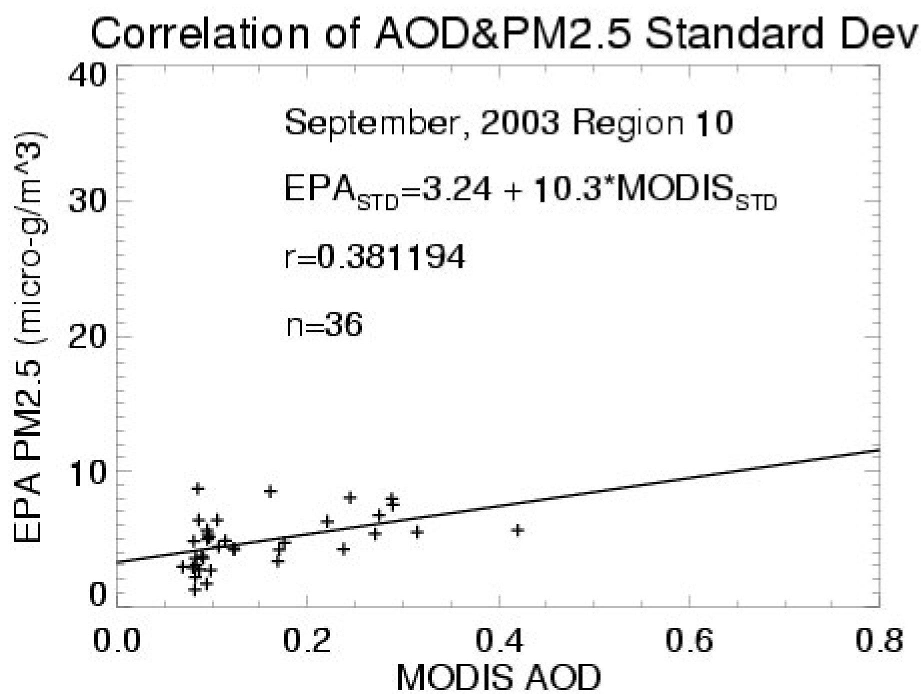
Correlation of AOD&PM2.5 Standard Dev
September, 2003 Region 10
EPA$_{STD}$=3.24 + 10.3*MODIS$_{STD}$
r=0.381194
n=36
EPA PM2.5 (micro-g/m^3)
MODIS AOD
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Appendix D

Acronyms

AOD - **A**erosol **O**ptical **D**epth
AQI - **A**ir **Q**uality **I**ndex
ARL - **A**ir **R**esources **L**aboratory
BAM - **B**eta **A**ttenuation **M**onitor
CIMSS - **C**ooperative **I**nstitute for **M**eteorological **S**atellite **S**tudies
COT - **C**loud **O**ptical **T**hickness
EDAS - **E**ta **D**ata **A**ssimilation **S**ystem
EPA - United States **E**nvironmental **P**rotection **A**gency
ESA - **E**arth **S**cience **A**pplications
ESE - **E**arth **S**cience **E**nterprise
FEM - **F**ederal **E**qivalent **M**onitor
FRM - **F**ederal **R**eference **M**onitors
GOES - **G**eostationary **O**perational **E**nvironmental **S**atellite
GRIB - **Gri**dded **B**inary
IDEA - **I**nfusing satellite **D**ata into **E**nvironmental **A**pplications
MODIS - **Mod**erate **R**esolution **I**maging **S**pectroradiometer
MSA - **M**etropolitan Statistical **A**rea
NAMS - **N**ational **A**mbient **M**onitoring **S**tations
NASA - **N**ational **A**eronautics and **S**pace **A**dministration
NCEP - **N**ational **C**enters for **E**nvironmental **P**rediction
NESDIS - **N**ational **E**nvironmental **S**atellite, **D**ata and **I**nformation **S**ervices
NOAA - **N**ational **O**ceanic and **A**tmospheric **A**dministration
PM - **P**articulate **M**atter
$PM_{2.5}$ - **P**articulate **M**atter less than **2.5** μm in diameter
SLAMS - **S**tate and **L**ocal **A**ir **M**onitoring **S**tations
TEOM - **T**apered **E**lement **O**scillating **M**icrobalance
US - **U**nited **S**tates
WF_ABBA - **W**ild **F**ire **A**utomated **B**iomass **B**urning **A**lgorithm
WRI - **W**orld **R**esources **I**nstitute

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14. ABSTRACT
Under NASA's Earth Science Applications Program, the Infusing satellite Data into Environmental Applications (IDEA) project examined the relationship between satellite observations and surface monitors of air pollutants to facilitate a more capable and integrated observing network. This report provides a comparison of satellite aerosol optical depth to surface monitor fine particle concentration observations for the month of September 2003 at more than 300 individual locations in the continental US. During September 2003, IDEA provided prototype, near real-time data-fusion products to the Environmental Protection Agency (EPA) directed toward improving the accuracy of EPA's next-day Air Quality Index (AQI) forecasts. Researchers from NASA Langley Research Center and EPA used data from the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument combined with EPA ground network data to create a NASA-data-enhanced Forecast Tool. Air quality forecasters used this tool to prepare their forecasts of particle pollution, or particulate matter less than 2.5 microns in diameter (PM2.5), for the next-day AQI. The archived data provide a rich resource for further studies and analysis. The IDEA project uses data sets and models developed for tropospheric chemistry research to assist federal, state, and local agencies in making decisions concerning air quality management to protect public health.

15. SUBJECT TERMS
Particulate matter; Air quality forecast; MODIS; AIRNow; PM2.5; Aerosol; Air pollution; Earth Science data applications; Satellite data

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